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☐ 1. Document ID: US 20020015743 A1

L2: Entry 1 of 6 File: PGPB Feb 7, 2002

PGPUB-DOCUMENT-NUMBER: 20020015743
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020015743 A1

TITLE: USE OF THE RB1, GINSENOSIDE FOR STIMULATING ELASTIN SYNTHESIS

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

☐ 2. Document ID: US 6444237 B1

L2: Entry 2 of 6 File: USPT Sep 3, 2002

DOCUMENT-IDENTIFIER: US 6444237 B1
TITLE: Herbal composition for enhancing sexual response

Abstract Text (1):
The present invention provides a unique combination of herbal ingredients designed to overcome natural inhibitors of human sexual response and allow for improved response and psychological effects. The composition is comprised of extracts taken from crataegus monogyna berry, turnera diffusa, pfaffia paniculata, ginkgo biloba, pygeum africanum, and ginsenosides extract, that are combined with L-arginine, L-glutamic acid and L-theanine in amounts effective to produce desired results.

Detailed Description Paragraph Table (1):
Weight in Component grams L-Arginine 1.5 g L-Glutamic acid .15 g Crataegus monogyna berry extract .08 g Turnera diffusa extract .07 g Pfaffia paniculata extract .07 g Ginkgo biloba extract .06 g Pygeum africanum extract .05 g L-Theanine .04 g Ginsenosides extract .02 g

Detailed Description Paragraph Table (2):
Weight in Component grams L-Arginine 3.0 g L-Glutamic acid .30 g Crataegus monogyna berry extract. .16 g 7:1 Turnera diffusa extract 4:1 .14 g Pfaffia paniculata extract .14 g Ginkgo biloba extract .12 g Pygeum africanum extract .10 g L-Theanine .08 g Ginsenosides extract .04 g

Detailed Description Paragraph Table (3):
Weight in Component grams L-Arginine 1.5 g L-Glutamic acid .15 g Crataegus monogyna berry extract .08 g Turnera diffusa extract .07 g Pfaffia paniculata extract .07 g Ginkgo biloba extract .06 g Pygeum africanum extract .05 g L-Theanine .04 g Ginsenosides extract .02 g BEC .25 g

CLAIMS:

1. An orally administered composition of ingredients for enhancing sexual response

comprising at least about 1.5 grams of L-arginine, at least about 0.04 grams of L-theanine, and effective amounts of each of the following: L-glutamic acid, crataegus monogyna berry extract, turnera diffusa extract, pfaffia paniculata extract, ginkgo biloba extract, pygeum africanum extract, and ginsenoside, wherein said extracts include concentrates of water-soluble or alcohol-soluble plant components.

15. An orally administered composition of ingredients for enhancing sexual response comprising at least about 1.5 g of L-arginine, at least about 0.04 g of L-theanine, at least about 0.15 g of L-glutamic acid, at least about 0.08 g of crataegus monogyna berry extract, at least about 0.07 g of tumera diffusa, at least about 0.07 g of pfaffia paniculata extract, at least about 0.06 g of ginkgo biloba extract, at least about 0.05 g pygeum africanum extract, and at least about 0.02 g of ginsenosides, wherein said extracts are concentrates of water-soluble or alcohol-soluble plant components.

☐ 3. Document ID: US 6326202 B1

L2: Entry 3 of 6 File: USPT Dec 4, 2001

DOCUMENT-IDENTIFIER: US 6326202 B1
TITLE: Stable high ginsenoside-yielding callus line of Panax quinquefolium (American ginseng) and a method for developing such stable high ginsenoside-yielding callus line

Detailed Description Text (39):
(e) TLC analysis of crude ginsenoside extract.

Detailed Description Text (41):
(f) HPLC analysis of crude ginsenoside extract.

☐ 4. Document ID: US 6132726 A

L2: Entry 4 of 6 File: USPT Oct 17, 2000

DOCUMENT-IDENTIFIER: US 6132726 A
TITLE: Process for removing impurities from natural product extracts

Brief Summary Text (12):
One of the best studied and documented activities of ginseng is its ability to act as a stimulant and anti-fatigue agent. Further studies have also indicated that Panax ginseng could increase locomotion activity and modify feline EEG recording. Panax ginseng's adaptogenic effects are believed to be due to the action of ginsenosides on the adrenal cortex and on the brain. In 1985, Saito found, from studies with mice and organ cultures, that ginsenoside Rb.sub.1 plays an important role in the catecholamine synthesis of catecholaminergic neurons of the brain, in the ganglion

and in the chromaffin cells of the adrenal cortex, as well as in the formation of nerve fibers and in the function of the sympathetic nerve endings. The foundation of these various nerve fibers are important in maintaining glucocorticoid secretion, which regulates the bodies ability to deal with stress. Rg.sub.1, on the other hand, is believed to play an important role in the memory and in sexual behavior. Also, a significant release of adrenocorticotropic hormone (CTH) by rat pituitary cell cultures was observed after doses of Rg.sub.1 by Odani et al. in 1987. Tsang et al. were able to show that a total ginsenoside extract can influence brain functions and behavior patterns.

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Draw Desc | Image KWIC

☐ 5. Document ID: US 4795742 A

L2: Entry 5 of 6 File: USPT Jan 3, 1989

DOCUMENT-IDENTIFIER: US 4795742 A
TITLE: Therapeutic composition from plant extracts

Detailed Description Text (4):
The ginsenoside extract has a melting point generally in the range of 192.degree. to 202.degree. C.

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Draw Desc | Image KWIC

☐ 6. Document ID: US 4708949 A

L2: Entry 6 of 6 File: USPT Nov 24, 1987

DOCUMENT-IDENTIFIER: US 4708949 A
TITLE: Therapeutic composition from plant extracts

Brief Summary Text (31):
The ginsenoside extract has a melting point generally in the range of 192.degree.to 202.degree. C.

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Draw Desc | Image KWIC

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Terms	Documents
ginsenoside extract	6

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DATE: Friday, February 07, 2003

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DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ			
L1	ginsenoside	350	L1
L2	ginsenoside extract	6	L2

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Search Results - Record(s) 1 through 10 of 15 returned.

☐ 1. Document ID: US 20020142463 A1

L3: Entry 1 of 15 File: PGPB Oct 3, 2002

PGPUB-DOCUMENT-NUMBER: 20020142463
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020142463 A1

TITLE: Method for the mass propagation of adventitious roots of ginseng, camphor ginseng and wild ginseng by tissue culture and the improvement of their saponin content

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Draw Desc | Image | KWIC

☐ 2. Document ID: US 20020136785 A1

L3: Entry 2 of 15 File: PGPB Sep 26, 2002

PGPUB-DOCUMENT-NUMBER: 20020136785
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020136785 A1

TITLE: Ginseng berry extracts and pharmaceutical compositions from ginseng berry for the treatment of type 2 diabetes and obesity

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Draw Desc | Image | KWIC

☐ 3. Document ID: US 6458361 B1

L3: Entry 3 of 15 File: USPT Oct 1, 2002

DOCUMENT-IDENTIFIER: US 6458361 B1
TITLE: Method of producing a liquid composition comprising ginseng, cordyceps, and ganoderma lucidum

Detailed Description Text (6):
The chemical constituents of the ginseng are the following: (1) Essential oils (0.05%): panaxynol, .beta.-elemene, panacene, and panaxin. (2) Saponins (4%): ginsenisides --Ro, --Ra, --Rb.sub.1, --Rb.sub.2, --Rc, --Rd, --Re, --Rf, Rg.sub.13, --Rb.sub.1, --Rb.sub.2, --Rc, --Rd being 20-S-protopanaxadiol, of gensenosides --Re, Rf, Rg.sub.1, Rg.sub.2 being 20-S-protopanaxatriol). (3) Sugars: monosaccharides about 1.5% (D-glucose, D-fructose), disaccharides (sucrose, maltose), triaccharides

(trisaccharides A, B, C); (4) .beta.-sitosterol, .beta.-sitosteryl-glucoside, vitamin B, choline. It is worth to mention that ginsenosides are found to be effective in the treatment of cancer patients.

Detailed Description Text (8):
Many herbs have long been known to affect the immune system, but only recent have scientists considered them and adjunct cancer therapies. Such herbs, one of which is ginseng, often prompt the body's cell to secrete cytokines, which then enhance the immune response. Besides, the pharmacology of the ginseng is the following: (1) Tonifying effect: Ginseng acts on the pituitary and stimulates the adrenal gland, thus increasing the body's resistance to harmful stimulation or stress, and allowing the body to withstand extreme temperatures. (2) Nervous system-stimulating effect: Ginseng hastens nervous reflexes, speeds up transmission of nervous impulses, increases the intensity of conditioned reflexes, improves the ability to think analytically and overall mental performance, and diminishes fatigue. The crude saponin of ginseng stimulates the central nervous system and acts against muscular fatigue and tension. (3) Cardiotonic effect: Ginseng causes the heart to contract more strongly, as do the cardio-glycosides. The alcohol extract is more potent in this action than the aqueous extract. Animal studies show that small doses of ginseng cause contraction of peripheral blood vessels, thus slightly increasing blood pressure. (4) Stimulating sexual functions: Ginseng stimulates the hormones of sex glands, thus increasing sexual function in males and females. (5) Hypoglycemic effect: Ginseng affects metabolism and lowers blood sugar level by acting synergetically with insulin. (6) Antidiuretic effect: Ginseng's antidiuratic action is similar to that of desoxycorticosterone in increasing secretion of aldosterone, causing retention of sodium, thus decreasing excretion of urine. (7) Effect on digestion, absorption, and metabolism: Ginseng increases protein synthesis and also appetite, and causes a lowering of blood cholesterol. (8) Antiallergic effect: Ginseng decreases allergic shock caused by horse blood serum, and dramatically inhibits edema due to allergy. These actions are probably due to ginseng's antihistamine actions. (9) Other effects: (a) Ginsenoside R.sub.1 possesses a slight sedative action. (b) Ginsenoside Rb.sub.2, Re, Rg.sub.1 stimulates DNA, protein, and fat synthesis in mice bone-marrow cells. (c) Ginsenoside--Rg.sub.1 diminishes fatigue. (d) Ginsenoside--Rb.sub.1 prevents blood hemolysis. (e) Ginseng promotes the process of hemopoiesis.

☐ 4. Document ID: US 6444233 B1

L3: Entry 4 of 15 File: USPT Sep 3, 2002

DOCUMENT-IDENTIFIER: US 6444233 B1
TITLE: Triterpene compositions and methods for use thereof

Detailed Description Text (36):
A combination of CTLC with chloroform-methanol-water (100:30:3) and column chromatography has been described for the isolation of ginsenosides (Hostettmann et al., 1980). Saponins also have been obtained with chloroform-methanol-water mixtures on silica gel plates. Two protoprimulagenin A glycosides from Eleutherococcus senticosus roots (Araliaceae) were purified by CTLC (chloroform-methanol-water 65:35:7) after column chromatography on silica gel and gel filtration on Sephadex LH-20 (Segiet-Kujawa and Kaloga, 1991). For the isolation of cycloartane glycosides from Passiflora quadrangularis (Passifloraceae), the solvent system ethyl acetate-ethanol-water (8:2:1 or 16:3:2) was used at a flow rate of either 1 ml/min (Orsini et al., 1987) or 1.5 ml/min (Orsini and Verotta, 1985).

Detailed Description Text (59):

Ginsenosides have been isolated from Panax trifolius (Araliaceae) by a two-step procedure, involving chromatography on a Waters Prep 500 system (radially compressed columns) with three silica gel cartridges (300.times.57 min) arranged in series. The eluent was the upper phase of n-butanol-ethyl acetate-water (4:1:5) and charges of 4 g were injected. Semi-preparative HPLC on a carbohydrate column (Waters, 300.times.7.8 mm) with acetonitrile-water (86:14 or 80:20) at a flow rate of 2 ml/min was employed for final purification (Lee and der Marderosian, 1988).

Detailed Description Text (72):
Hydroxyapatite (Ca.sub.10 (PO.sub.4).sub.6 (OH).sub.2) is more hydrophilic than silica gel and can be used with simple binary aqueous solvent systems, thus facilitating detection by UV. It is stable in neutral and alkaline media. Recently, hard spherical particles of hydroxyapatite which are resistant to high pressure (up to 150 kg/cm.sup.2) have been prepared, broadening the applications of HPLC. Saponins differing only in the terminal pentose unit and which can not be separated by RP-HPLC can be resolved using this technique (Kasai et al., 1987b). The separation of ginsenosides from Panax ginseng (Araliaceae) was achieved in the isocratic mode (acetonitrite-water, 80:20) or, better, with a linear gradient (acetonitrile-water 70:30.fwdarw.90:10) (Kasai et al., 1987b). As is observed for silica gel, the glycosides are eluted in order of increasing polarity, i.e., the opposite of RP-HPLC.

Detailed Description Text (76):
Microporous glass (MPG) has a high chemical resistance and is stable between pH 2 and 12. Octadecyl porous glass (MPG-ODS) has been prepared as a packing for reversed-phase HPLC and used for the rapid and efficient separation of saponins. For example, it is possible to separate both ginsenosides and saikosaponins simultaneously from extracts of combination drugs containing ginseng and bupleurum root using an acetonitrile-water (25.5:74.5) mixture for the separation (Kanazawa et al., 1990a). Comparison of MPG-ODS and silica-ODS columns for the HPLC of ginseng extract and for mixtures of ginsenosides has shown that the retention behavior was similar but that capacity factors were smaller on an MPG-ODS column. The resolution of certain pairs of ginsenosides was better on MPG-ODS columns (Kanazawa et al., 1993).

Detailed Description Text (125):
For assigning chemical shifts, it is helpful to compare observed data with data reported for model and related compounds. As a guide to some of the typical chemical shifts in the .sup.13 C-NMR spectrum of a triterpene saponin, one may use the known shifts of the bayogenin glycoside (Domon and Hostettmann, 1984). Additionally, compilations of assignments of .sup.13 C-NMR signals for oleanane (Patra et al., 1981; Agrawal and Jain, 1992), ursane, lupane (Wenkert et al., 1978; Sholichin et al., 1980), hopane (Wenkert et al., 1978; Wilkins et al., 1987) and lanostane (Parrilli et al., 1979) triterpenes have been made (Nakanishi et al., 1983). The relevant data for dammarane glycosides have been summarized in a review (Tanaka and Kasai, 1984), while .sup.13 C-NMR spectroscopy of saikogenins (Tori et al., 1976a) and of saikosaponins (Tori et al., 1976b) has been described. Ginseng sapogenins and related dammarane triterpenes also have been studied (Asakawa et al., 1977). .sup.13 C-NMR spectroscopy of acacic acid has also been described (Kinjo et al., 1992).

Detailed Description Text (130):
However, the methyl peaks of triterpenes are readily discernible and most proton resonance positions in oleanene, ursene and related skeletons have been assigned since the 1960s (Kojima and Ogura, 1989) by a variety of techniques. For example, the complete .sup.1 H- and .sup.13 C-NMR spectral assignments of soyasapogenol B (33) and the configuration of the C-4 hydroxymethyl substituent have been established by a combination of .sup.13 C-DEPT, .sup.13 C-APT, 2-D correlation spectroscopy (COSY) (.sup.1 H-.sup.13 C-COSY, .sup.1 H-.sup.1 H COSY) and .sup.1 H-.sup.1 H ROESY (2-D nuclear Overhauser enhancement (NOE) in a rotating frame) techniques (Baxter et al., 1990). The assignments of quaternary carbon resonances in this sapogenin have been confirmed by .sup.1 H-detected heteronuclear multiple-bond (HMBC) and one-bond (HMQC) spectroscopy (Massiot et al., 1991b). A full interpretation of the .sup.1 H-NMR spectra of diosgenin and solasodine has also been achieved (Puri et al, 1993).

Detailed Description Text (182):

Apart from the usual applications of IR, there are one or two features which are of particular relevance to the structure elucidation of saponins. IR is useful for the characterization of steroid sapogenins because several strong bands between 1350 and 875 cm.sup.-1 are diagnostic for the spiroketal side chain (Jones et al., 1953). Four bands, 980 (A band), 920 (B band), 900 (C band) and 860 cm.sup.-1 (D band) have been assigned as characteristic of the E and F rings. With 25R-sapogenins the B band has a stronger absorbance than the C band, while in the 25R-series this relationship is reversed. In sapogenins having oxygen substituents in the E and F rings or at position 27, the four bands are considerably changed (Takeda, 1972).

Detailed Description Text (189):
On complete hydrolysis of a glycoside, the glycoside linkage is cleaved to liberate the component monosaccharides and the non-carbohydrate moiety (the aglycone or genin). The non-carbohydrate portion from the hydrolysis of saponins is termed a sapogenol or sapogenin. All known saponins are O-glycosides, with ether or ester linkages.

Detailed Description Text (206):
A systematic study involving crude preparations of hesperidinase, naringinase, pectinase, cellulase, amylase and emulsin has shown that hesperidinase, naringinase and pectinase were the most effective in hydrolyzing ginsenosides (Kohda and Tanaka, 1975).

Detailed Description Text (210):
The technique of GC-MS also is valuable for the characterization of sapogenins. The trimethylsilyl derivatives are normally prepared and then analyzed in the spectrometer. An example is the application to the investigation of oleanane- and ursane-type triterpenes. Nine silylated triterpenes were separated by GC on OV-101 packing and their mass spectral patterns were investigated; those containing a 12-en double bond underwent a characteristic retro-Diels-Alder reaction (Burnouf-Radosevich et al., 1985). This technique has also been used for the determination of triterpenes from licorice (Bombardelli et al., 1979).

Detailed Description Text (211):
HPLC analysis does not require derivatization and gives excellent reproducibility and sensitivity for the analysis of triterpenes. Both normal-phase (analysis of quinoa sapogenins; Burnouf-Radosevich and Delfel, 1984) and RP-HPLC (Lin et al., 1981) can be employed, but a disadvantage of RP-HPLC is that the compounds tend to precipitate in the aqueous mobile phases.

Detailed Description Text (757):
The following references, to the extent that they provide exemplary procedural or other details supplementary to those set forth herein, are specifically incorporated herein by reference. Aerts et al., Plant J., 5:635-643, 1994. Agrawal, "NMR spectroscopy in the structural elucidation of oligosaccharides and glycosides," Phytochemistry, 31:3307-3330, 1992. Aird, Hamill, Rhodes, "Cytogenetic analysis of hairy root cultures from a number of species transformed by Agrobacterium rhizogenes," Plant Cell Tissue Organ Cult., 15:47-57; 1988. Akiyama et al., J. Biol. Chem., 262:5592-5595, 1987. Allen et al., "Leguminosae, A source book of characteristics uses and nodulation," The University of Wisconsin Press, Madison, Wis., 1981. Armitage, In: Statistical Methods in Medical Research, Wiley and Sons, New York, N.Y., p 205, 1971. Arnon, R., et al., Proc. Natl. Acad. Sci. (USA) 77:6769-6772 1980. Baba, Hanada, Hashimoto, "The study of ultraviolet B-induced apoptosis in cultured mouse keratinocytes and in mouse skin," J. Dermatol. Sci., 12:18-23, 1996. Baxter, Price, Fenwick, "Sapogenin structure: analysis of the .sup.13 C- and .sup.1 H-NMR spectra of soyasapogenol b," J. Nat. Prod., 53:298-302, 1990. Bellacosa, Feo, Godwin, Bell, Cheng, et al., Int. J. Cancer, 64:280-285, 1995. Berton, Mitchell, Fischer, Locniskar, "Epidermal proliferation but not the quantity of DNA photodamage is correlated with UV-induced mouse skin carcinogenesis," Invest. Dermatol., 109:340-347, 1997. Beutler, Kashman, Pannell, Cardellina, Alexander, Balaschak, Prather, Shoemaker, Boyd, Bioorganic and Medicinal Chemistry, 5:1509-1517, (1997). Boll and von Philipshon, "NMR studies and the absolute configuration of Solanum alkaloids (spiroaminoketalalkaloids), Acta Chem. Scand., 19:1365-1370, 1965. Brinkmann et al., Proc. Natl. Acad. Sci., USA, 88(19):8616-8620, 1991. Burchell et al., J. Immunol., 131(1):508-513, 1983. Campbell, in Monoclonal Antibody Technology,

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8:9-22, 1994. Potterat, Hostettmann, Stoeckli-Evans, Saadou, "Saponins with an unusual secoursene skeleton from Sesamum alatum THONN., Helv. Chim. Acta, 75:833-841, 1992. Prehn, "Regeneration versus neoplastic growth," Carcinogenesis, 18(8): 1439-1444, 1997. Puri, Wong, Puri, "Solasodine and diosgenin: .sup.1 H and .sup.13 C assignments by two-dimensional NMR spectroscopy," Mag Res. Chem., 31:278-282, 1993. Reeves, Nielson, Fahey, Am. Inst. Nutr., 1939, 1993. Reisfeld et al., Melanoma Antigens and Antibodies, p. 317, 1982. Reznicek, Jurenitsch, Kubelka, Michl, Korhammer, Haslinger, "Isolierung und Struktur der vier Hauptsaponine aus Solidago gigantea var. serotina," Annalen, 989-994, 1990. Reznicek, Jurenitsch, Michl, Haslinger, "The first structurally confirmed saponin from Solidago gigantea: structure elucidation by modern NMR techniques," Tetrahedron Lett., 30:4097-4100, 1989b. Reznicek, Jurenitsch, Robien, Kubelka, "Saponins in Cyclamen species: configuration of cyclamiretin C and structure of isocyclamin," Phytochemistry, 28:825-828, 1989a. Rhodes, et al., "Influence of exogenous hormones on the growth and secondary metabolite formation in transformed root cultures," Plant Cell Tissue Organ Culture, 38:143-151; 1994. Rodriguez, Castro, Riguera, "Holothurinosides: new anti-tumour non sulphated triterpenoid glycosides from the sea cucumber Holothruia forskalii," Tetrahedron, 47:4753-4762, 1991. Royal I and Park M, J. Biol. Chem. 270:27780-27787, 1995. Sasaki, Udagawa, Ishimaru, Hayashi, Alfermann, Nakanishi, Shimomura, "High forskolin production in hairy roots of Coleus forskohlii," Plant Cell Reports 17:457-459, 1998. Sashida, Kawashima, Mimaki, "Novel polyhydroxylated steroidal saponins from Allium giganteum," Chem. Pharm. Bull., 39:698-703, 1991. Schenk, Hilderbrandt, "Medium and techniques for induction and growth of monocotyledonous and dicotyledonous plant cell cultures," Can. J. Bot., 50:199-204; 1972. Schopke, Wray, Rzazewska, Hiller, "Bellissaponins BA.sub.1 and BA.sub.2,

Other Reference Publication (2):
Chen et al., Yaoxue Xuebao, 32(2): 144-147. Studies on the triterpene sapogenins from Albizziae cortex., Feb. 1997.*

Other Reference Publication (10):
Baxter et al., "Sapogenin structure: analysis of the .sup.13 C- and .sup.1 H-NMR spectra of soyasapogenol b," J. Nat. Prod., 53:298-302, 1990.

☐ 5. Document ID: US 6261565 B1

L3: Entry 5 of 15 File: USPT Jul 17, 2001

DOCUMENT-IDENTIFIER: US 6261565 B1
TITLE: Method of preparing and using isoflavones

Brief Summary Text (22):
Saponogenins are C-27 sterols in which the side chain has undergone metabolic changes to produce a spiroketal. Saponogenins occur naturally as saponins, which are 3-O-glycosides of the parent steroid or triterpenes. Digitonin from Digitalis is a saponin. Saponins include glucosides of sapogenin such as triterpenoides or steroids and saccharides such as glucose, arabinose, galactose or glucuronic acid. Typical examples of leguminous saponins are glycyrrhizin (glycyrrhetinic acid+glucuronic acid) contained in Glycyrrhiza glabra, soysaponin contained in soybean and alfalfasaponin contained in Medicago sativa. Saponins also include chemical entities identified as triterpene phenols such as tomatine, soyasapogenols A, B, C, D, E and F, ginsenoside fraction 3 and 4, medicagenic acid, hederagenin, glycyrrhizin digitonin, quillaja saponin, lucernic acid and zahnic acid. The natural modifications of these compounds found in the vegetable source are also included in this identification.

Brief Summary Text (37):
The resulting composition is expected to comprise in a preferred from: between 5% and 95% isoflavones, between 0% and 70% lignans, and between 2% and 70% saponins and sapogenins. In a more preferred form, the composition will be extracted from soy. In another preferred form, the composition will contain a ratio of (saponins plus saponogenins) to isoflavones from 1:100 to 100:1, with the isoflavones consisting predominantly of naturally occurring derivatives of genistein and/or its precursor biochanin A and daidzein and/or its precursor formononetin, with a ratio of the genistein derivatives to daidzein derivatives from 100:1 to 1:100. Preferably, the isoflavones are predominantly glycosylated derivatives.

CLAIMS:

19. The composition of claim 1 in which the saponins are selected from the group consisting essentially of tomatine, soyasapogenols A, B, C, D, E and F, soyasaponin, alfalfasaponin, ginsenoside fraction 3 and 4, medicagenic acid, hederagenin, glycyrrhizin, digitonin, quillaja saponin, lucernic acid, zahnic acid, and natural modifications of these compounds.

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Draw Desc | Image KWIC

☐ 6. Document ID: US 6241995 B1

L3: Entry 6 of 15 File: USPT Jun 5, 2001

DOCUMENT-IDENTIFIER: US 6241995 B1
TITLE: Polygala senega compositions and methods of use

Detailed Description Text (6):
By "Polygala senega saponin extract" is meant a composition comprising one or more of the various sapogenin glycosides derived from the P. senega plant, as well as isomers or derivatives thereof, which individually or in combination act as immunological adjuvants, for enhancing non-specific immunity, as well as enhancing the action of an antigen co-administered therewith. The term encompasses crude saponin extracts which contain all or most of the saponins present in a given P. senega plant, as well as partially purified and highly purified saponins derived from P. senega. The term "extract" as used herein refers to both liquid and solid forms (e.g., by the elimination of the solvent) of one or more of the P. senega saponins. Immunological adjuvant activity of the P. senega saponins can be tested using standard techniques including ELISAs, hemagglutination assays, neutralization assays and the like.

Other Reference Publication (8):
Kenarova et al., "Immunomodulating Acitivity of Ginsenoside RG from Panax Ginseng," Japan J. Pharmacol.54:447-454 (1990).

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Draw Desc | Image KWIC

☐ 7. Document ID: US 6129924 A

L3: Entry 7 of 15 File: USPT Oct 10, 2000

DOCUMENT-IDENTIFIER: US 6129924 A
TITLE: Diglyceride and sterol based organometallic complexes and pharmaceutical compositions and dietetic products containing them

Brief Summary Text (8):
Some sapogenins have been described for the treatment of diabetes, (sarsasapogenin and similagenin for example, in EP 0 204 661). These are derivatives whose lateral chain is constituted of two cyclic spiro ethers.

Brief Summary Text (12):
ginsenoside Rb2 described in Chemical Abstracts 105(17):146237r which is a summary of the Japanese patent JP 61024597. This product tested on the rat acts as an antidiabetic, the dose via the intraperitoneal route being 10 mg/per rat. This dose reduces the glycaemia by 20%.

☐ 8. Document ID: US 6083932 A

L3: Entry 8 of 15 File: USPT Jul 4, 2000

DOCUMENT-IDENTIFIER: US 6083932 A
TITLE: Pharmaceutical compositions derived from ginseng and methods of treatment using same

Brief Summary Text (5):
Ginseng is the name given to the dried roots of the ginseng plants (genus Panax) and, more particularly, to extracts of those roots. The roots and their extracts contain a variety of substances including saponins and sapogenins.

Brief Summary Text (6):
Ginseng has been extensively used, mostly in Asia, as a tonic to promote health and well being, and as a medicine in the treatment of various disease conditions. The beneficial attributes of ginseng are attributed to its saponin content, a mixture of dammarane triterpene glucosides referred to collectively as ginsenosides. Some ginsenosides have been isolated, and their structure determined. Such ginsenosides include Rb1, Rb2, Rc, Rd, Re, Rf and Rg (see U.S. Pat. No. 4,157,894 to Bombardelli).

Brief Summary Text (7):
U.S. Pat. No. 5,137,878 to Pang et al contains a discussion of prior art extracts. The complete disclosure of U.S. Pat. No. 5,137,878 is hereby incorporated by reference in this application. U.S. Pat. No. 5,137,878 discloses that ginsenosides Rb1 and Rg1 enhance the availability of ACh in the cortical and hippocampal regions of the brain and alleviate the symptoms of Alzheimer-type senile dementia. The patent also discloses a process for isolating ginsenoside Rb1.

Brief Summary Text (9):
The present inventors have now discovered that administration of a specific ginseng extract, which the inventors have called HT1001 containing about 20-50%, preferably about 25-40%, total ginsenosides (a.k.a. saponins), is as effective as administration of either a single pure ginsenoside alone,

Brief Summary Text (10):

or administration of an extract containing 100% of total ginsenosides. Therefore, the present invention is directed to the HT1001 extract, as well as pharmaceutical compositions containing the extract. The present invention is also directed to a method of treating a brain condition in a patient in need thereof, comprising administering to the patient a brain condition treating-effective amount of the HT1001 extract. The brain condition can, for example, be senile dementia, Alzheimer's disease, Parkinson's disease, attention deficit disorder, mental retardation or stroke.

Drawing Description Text (5):
FIGS. 15-20 show mass spectra of pure ginsenosides Rb1, Rg1, Re, Rc, Rd and quinquenoside R1.

Detailed Description Text (14):
Peak 1 (FIGS. 4 and 10) is a mixture of two ginsenosides. The first, M+H 801, Fragments 423, 440, 621 was identified as ginsenoside Rg1 MW=800. The second, M+H 948, Fragments 422, 767 was identified as ginsenoside Re MW=947.

Detailed Description Text (15):
Peak 2 (FIGS. 5 and 11) M+H 1110, Fragments 768,486, 501, 667,948. Identified as ginsenoside Rb1 MW=1109.

Detailed Description Text (16):
Peak 3 (FIGS. 6 and 12) M+H 1180, Fragments 899, 456, 637. Identified as ginsenoside Rc MW=1079.

Detailed Description Text (17):
Peak 4 (FIG. 7) Mass unresolved as signal is overshadowed by other components. Possibly ginsenoside Rg2.

Detailed Description Text (19):
Peak 6 (FIGS. 8 and 13) M+H 948, Fragments 767, 749, 423. Identified as ginsenoside Rd MW=947.

Detailed Description Text (21):
Spectra of pure ginsenosides Rb1 (FIG. 16), Rg1 (FIG. 15), Re (FIG. 17), Rc (FIG. 18), Rd (FIG. 20) and QR1 (FIG. 19) are also provided.

Detailed Description Text (61):
Example 1 is a study of the effects of several extracts of HT1001, PQ4, PQ5, PQ6 and pure ginsenosides, on monoamine oxidase A (MAO A) and monoamine oxidase B (MAO B) activity in vitro.

Detailed Description Text (62):
HT-1001, related extracts and pure ginsenosides were evaluated for in vitro monoamine oxidase-A and monoamine oxidase-B inhibiting activity using the radiochemical procedure of Lyles and Callingham, Biochem. Pharmacol. 31: 1417-1424 (1982), employing either radiolabelled 5-hydroxytryptamine or .beta.-phenylethylamine as substrates for monoamine oxidase-A (MAO-A) or monoamine oxidase-B (MAO-B) respectively. Various concentrations of the compounds of interest were incubated in appropriately diluted homogenates of rat brain in a 0.2 M potassium phosphate buffer. After a 15 minute preincubation period the reaction was initiated by the addition of substrate. Incubations proceded at 37.degree. C. for 10 minutes. Incubation was terminated by the addition of acid and the radiolabelled products (5-hydroxyindoleacetic acid, 5-hydroxyindoleacetaldehyde or phenylacetic acid, phenylacetaldehyde) were extracted and quantified by liquid scintillation counting procedures. Incubations were done in triplicate and incubations including pheneizine a known MAO inhibitor were included as controls and for comparison. The percent inhibition of monoamine oxidase-A or monoamine oxidase-B activity compared to controls containing no experimental material was calculated.

Detailed Description Text (63):
A significant amount of MAO inhibiting activity was produced by HT-1001 lots 3 and 4 at a concentration of 10 mg/ml (Table 2). Further evaluation of HT-1001 the derived products PQ4, PQ5, PQ6 and pure ginsenosides demonstrated that most of the MAO

inhibiting activity resided in the PQ6 fraction. PQ6 was further fractionated into a saponin containing fraction (PQ6-S) and a lipid containing fraction (PQ6-L). Both PQ6-S and PQ6-L had comparable MAO inhibiting properties to each other and to the original PQ6 material.

Detailed Description Text (65):
Example 2 is a comparison of several batches of Rb1 extract, an extract of total ginsenosides (TS) containing 25% Rb1, 19.4% Rc1 and 21.6% Rg1+Re, and HT1001 on choline uptake in rat brain synaptomes. The Rb1 tested had greater than 98% purity. Rb1-52, Rb1-53 and Rb1-54 represent three different batches of Rb1. As the following table makes clear, HT1001 significantly increases choline uptake at concentrations of 0.9 and 9 mg/l.

Detailed Description Text (68):
In order to show that HT1001 is a more efficacious product than crude ginseng we wanted to demonstrate that after oral administration, HT1001 provides greater blood concentrations of particular ginsenosides than crude ginseng containing equivalent amounts of ginsenosides. We provided rats with oral doses of either 100 mg/kg HT1001 (8 mg/kg Rb1) or crude ginseng powder 500 mg/kg (8 mg/kg Rb1). Higher doses of HT1001 are unreasonable as we cannot feed the rats an equivalent concentration of Rb1 in ginseng powder. After one hour blood samples were taken and we attempted to measure the Rb1, concentration in the serum. Samples with higher Rb1 concentrations would indicate greater bioavailability. Unfortunately, the concentrations of Rb1, in the serum after oral administration of 100 mg/kg HT1001 or 500 mg/kg ginseng powder are too low to measure using our present techniques.

Detailed Description Text (69):
First, we studied the effects of HT1001 on Learning and Memory. Ginsenosides including Rb1, have been demonstrated to enhance learning and memory. As HT1001 is a mixture of ginsenosides, it may not have the same properties as pure Rb1. In order to show that HT1001 can enhance learning and memory we wanted to demonstrate that this product can provide a measurable increase in task acquisition and/or retention in a scientifically accepted learning paradigm. The Morris water maze is a scientifically demonstrated procedure which can test spatial learning and memory. Rats are required to learn the location of a hidden platform in a swimming pool. If rats treated with HT1001 learn the location of the platform faster than rats not treated with HT1001 then it is demonstrated that HT1001 enhances learning. The effects of HT1001 on memory can also be examined in scopolamine induced amnesia. If HT1001 enhances memory it should protect against memory loss in scopolamine treated animals.

Detailed Description Text (84):
We also studied the effects of HT1001 on choline uptake in synaptosomes. Ginsenoside Rb1 has been demonstrated to increase choline uptake (Benishin, Neurochem. Int. 21: 1-5 (1992)), A decrease in the production of the neurotransmitter acetylcholine is associated with memory loss and Alzheimer's disease. Rb1 has been demonstrated to increase choline uptake into neurons and this, presumably, enhances MS acetylcholine production which, in turn, alleviates memory impairment. In order to show that HT1001 has properties which alleviate memory loss, we wanted to establish that HT1001 increases choline uptake in nervous tissue preparations.

Detailed Description Text (88):
We also studied the immunostimulatory effects of HT1001. Ginseng is noted for its ability to stimulate the immune system. This stimulation is often associated with the oligosaccharide components of the ginseng. However, as HT1001 does contain some oligosaccharides and as ginsenosides contain saccharide constituents which are released upon digestion, it may be that HT1001 can also stimulate the immune system. In order to test this theory, mice fed HT1001 were be evaluated for immunological responses.

Detailed Description Text (91):
Previous studies (Zhang et al, Chinese Med. J. 103: 932-938 (1990)) have claimed that treatment with ginsenosides Rb1 and Rg1, decrease the levels of the aminergic neurotransmitter 5-hydroxytryptamine (serotonin) and its metabolite 5-hydroxyindoleacetic acid in rat and mouse brain. Unfortunately, the levels reported for 5-hydroxytryptamine and 5-hydroxyindoleacetic acid in the study by Zhang et al

(1990) are at least 50 times the usually reported levels. In order to provide valid information, we conducted our own studies on HT1001 and aminergic neurotransmitter levels in mice. Ginseng essence, which is water insoluble, as well as HT1001, was administered in corn oil.

Detailed Description Text (94):
Tables 8 and 9 indicate that no effects of HT1001 on aminergic neurotransmitters are evident when mice are fed HT1001 in water for 6 days. It is possible that administering HT1001 in corn oil rather than water promotes absorption of ginsenosides or that the difference in treatment duration affects the results. This study has now been repeated using corn oil as a carrier (Table 10). Unfortunately, no significant effects were noted, although 5-hydroxyindoleacetic acid and dihydroxyphenyl acetic acid levels appeared somewhat elevated, suggesting a possible increase in neurotransmitter turnover.

Detailed Description Text (99):
HT1001 provides a water soluble, concentrated preparation of ginsenosides. HT1001 provides 3.4 times the concentration by weight of ginsenosides than does root powder. Evidence indicates that HT1001 can improve the retention of newly learned tasks in animal models and, consistent with this idea, it can promote choline uptake. The ability of HT1001 to promote choline uptake in rat brain synaptosomes has been established, suggesting that HT1001 may be used in the treatment of Alzheimer's disease. Preliminary studies suggested that HT1001 might have effects on the 5-hydroxytryptamine neurotransmitter system and that these effects might be indicative of an antidepressant effect. Further studies did not substantiate this observation. HT1001 does not stimulate the immune system after oral administration. HT1001 has extremely low microbial counts, and this suggests potential antimicrobial properties associated with chemicals found in HT1001.

Detailed Description Text (124):
A study of the neurotrophic effects of HT1001 and some pure ginsenosides was conducted. A new mechanism of action for HT1001 was shown, which is the stimulation of neurite outgrowth in a PC12 cell line. This research indicates that HT1001 may not only act to alleviate symptoms, but may alter the progression of neurodegenerative diseases. The beneficial effects (prevention/treatment) of HT-1001 may apply to degenerative diseases such as senile dementia, Parkinson's disease, Alzheimer's disease, multi-infarct dementia, etc.

Detailed Description Text (136):
A study of the effects of HT1001 and some pure ginsenosides on calcium channel activity in cultured neuroblastoma cells was conducted.

Other Reference Publication (5):
Schulten et al. Identification of Ginsenosides from Panax Ginseng in Fractions Obtained by High-Performance Liquid Chromatography by Field Desorption Mass Spectroscopy, Multiple Internal Reflection Infrared Spectroscopy and Thin Layer Chromatography. J. Chromatography. 212 (1), pp. 37-49. (Jul. 1981).

Other Reference Publication (6):
Benishin et al. Effects of Ginsenoside Rb1 on Central Cholinergic Metabolism. Pharmacology. 42, pp. 223-229. (1991). No month given.

Other Reference Publication (8):
Chen, X. Cardiovascular Protection by Ginsenosides and their Nitric Oxide Releasing Action. Clinic. Exp. Pharmacol. Physiol. 23, pp. 728-732. (1996). No month found.

Other Reference Publication (9):
Salim et al. Ginsenoside Rb1 Regulates ChAT, NGF, and trkA mRNA Expression in the Rat Brain. Molec. Brain Res. 47(1-2), pp. 177-182. (Jul. 1997).

☐ 9. Document ID: US 6004609 A

L3: Entry 9 of 15 File: USPT Dec 21, 1999

DOCUMENT-IDENTIFIER: US 6004609 A
TITLE: Ginseng processing method and processed ginseng prepared by the same

Brief Summary Text (5):
According to a report by the World Health Organization (WHO), red ginseng, green ginseng and white ginseng commonly include 18 types of pharmaceutically effective components such as ginsenoside, Ro, Ra.sub.1, Ra.sub.2, Ra.sub.3, Rb.sub.2, Rb.sub.3, Rc, Rd, Re, Rf, Rg.sub.1, Rg.sub.2, Rg.sub.3, Gh.sub.1, 20glc-Rf, Q-R.sub.1 and N-R.sub.1. Also, malonyl-Rb.sub.1, malonyl-Rb.sub.2, malonyl-Rc and malonyl-Rd are known to be included only in green ginseng and white ginseng, and Rs.sub.1, Rs.sub.2, Rg.sub.3 (S), Rh.sub.2, N-R.sub.4, Rg.sub.2 (R), Rh.sub.1 (R) and Rh.sub.4 are known to be included only in red ginseng. Thus, it is regarded that the medicinal effects of ted ginseng originates from 8 types of these components newly synthesized from the components included in green ginseng and white ginseng.

Brief Summary Text (7):
Saponin including a sapogenin as a non-sugar component continuously generates foam when agitated in a solution, and causes hemolysis. Also, saponin may stimulate a mucous membrane depending on circumstances and acts as a harmful factor to a blood vessel by forming a complex with blood cholesterol.

CLAIMS:

12. The method of claim 1, whereby the concentration of at least one ginsenoside is increased.

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Draw Desc | Image | KWIC

☐ 10. Document ID: US 5919770 A

L3: Entry 10 of 15 File: USPT Jul 6, 1999

DOCUMENT-IDENTIFIER: US 5919770 A
TITLE: Metabolites of ginseng saponins by human intestinal bacteria and its preparation for an anticancer

Abstract Text (1):
This invention relates to ginsenoside Mc with formula (I), ##STR1## an intestinal flora metabolite of ginseng saponin and anticancer agent containing it as an active ingredient. In addition to a novel compound, the anticancer agent of this invention consists of one active ingredient elected from compound K, compound Y or 20(S)-protopanaxatriol, intestinal flora metabolites of ginseng saponin, together with one or more pharmaceutically acceptable carriers. Said agent is a novel type of potential anticancer agent since it has immunopotentiating actions including inhibitory actions on the vascularization of tumors and extravasation of cancer cells.

Brief Summary Text (5):

Among saponins extracted from Panax ginseng, for example, ginsenoside Rh.sub.2 [3-0-.beta.-D-glucopyranosyl-20(s)-protopanaxadiol] was reported to inhibit the proliferation of liver cancer cells (reference: Japanese Patent No. 89-28759).

Brief Summary Text (6):
Further, both ginsenoside Rg.sub.3 [3-0-[.beta.-D-glucopyranosyl(1.fwdarw.2)-.beta.-D-glucopyranosyl]-20(R)-protopanaxadiol] and ginsenoside Rb.sub.2 [20-0-[.alpha.-L-arabinopyranosyl(1.fwdarw.6)-.beta.-D-glucopyranosyl-3-0-[.beta.-D-glucopyranosyl(1.fwdarw.2)-.beta.-D-glucopyranosyl]-20(S)-protopa naxadiol] were reported to inhibit the vascularization of tumors and extravasation of cancer cells including inhibitory actions on the metastatis of cancer cells [References: Japanese Patent No. 93-9123, Sato et al.: Biol. Pharm. Bull., 17. 635(1994)].

Brief Summary Text (8):
Also, the structure of 20(S)-protopanaxatriol, isolated by sapogenin of Panax ginseng saponin, was already established (Nagai et al.: Tetrahedron, 27, 881(1971)].

Brief Summary Text (12):
In view of these situations, the inventors of this invention have investigated the metabolism of ginseng saponin associated by human intestinal bacteria and succeeded in isolating and identifying the following compounds, i.e., a) protopanaxadiol saponins(ginsenoside Rb.sub.1, ginsenoside Rb.sub.2 and ginsenoside Rc), b) compound K, compound Y and 20-0-[.alpha.-L-arabinofuranosyl(1.fwdarw.6)-.beta.-D-glucopyranosyl-20(S)-protopanaxadiol], which are called as ginsenoside Mc. metabolites of ginsenoside Rd, and c) 20(S)-protopanaxatriol, a metabolite of ginsenoside Rg.sub.1 and ginsenoside Re which belongs to protopanaxatriol saponin.

Brief Summary Text (14):
Therefore, the object of this invention is to provide a new compound of 20-0-[.alpha.-L-arabinofuranosyl(1.fwdarw.6)-.beta.-D-glucopyranosyl-20(S)-protopanaxadiol] having the following formula, a novel ginseng saponin metabolite by human intestinal bacteria(called as ginsenoside Mc) with the following characteristics.

Brief Summary Text (22):
In addition to ginsenoside compound Mc, a novel intestinal bacteria metabolite of novel ginseng saponin, another object of this invention is to provide an anticancer agent containing one active ingredient selected from intestinal bacteria metabolites of ginseng saponin such as compound K, compound Y, ginsenoside Mc and protopanaxatriol, together with one or more pharmaceutically acceptable carriers. These intestinal bacteria metabolites of ginseng saponin exhibits remarkable antineoplastic effects in the long run since they potentiate the inhibitory actions against cancer cells in lymphocyte and inhibit the vascularization of tumors and extravasation of cancer cells.

Detailed Description Text (2):
Preparation of ginsenoside Mc

Detailed Description Text (3):
The suspended solution of human flora was precultured in GAM medium overnight and then,100 mg of ginsenoside Rc was added to said medium to the desired concentration of 2% in a newly sterile GAM medium and then cultured at 37.degree. C. for 1 day. The medium was extracted by 1-butanol and the extracted solution was concentrated and purified on reversed/irreverse phase chromatography to give 25 mg of pure ginsenoside Mc.

Detailed Description Text (6):
Formulation examples 2.about.4: Based upon the same procedure as described in formulation 1, each preparation was obtained containing 30 mg of compound Y, ginsenoside Mc or 20(S)-protopanaxatriol, respectively, instead of 30 mg of compound K.

Detailed Description Text (8):

Formulation example 6.about.8: Based upon the same procedure as described in formulation 5, each preparation was obtained containing 15 mg of compound Y, ginsenoside Mc or 20(S)-protopanaxatriol, respectively, instead of 15 mg of compound K.

Detailed Description Text (21):
As shown in table 2, the experimental results revealed that ginsenoside, Mc and 20(S)-protopanaxatriol exhibited inhibitory activities on the proliferation of tumor cells

Detailed Description Text (34):
From the aforementioned results, it is noted that intestinal flora metabolites of ginseng saponin, such as compound K, compound Y, 20(S)-protopanaxatriol including ginsenoside Mc of this invention, are novel types of potential anticancer agent since they have immunopotentiating actions including inhibitory actions on the vascularization of tumors and extravasation of cancer cells.

Detailed Description Text (35):
The toxicity of ginsenoside Mc, a novel compound of this invention, is nearly negligible in some animal experiments with rats and mice and the products' stability of each preparation based upon each formulation example is quite effective.

Detailed Description Paragraph Table (1):
TABLE 1 Antitumor activity on the cancer cells of lymphocyte by intestinal flora metabolites of ginseng saponin Concentration (.mu.g/ml) Antitumor activity (%) Control 31.3 1 Compound K 1.56 51.5 1.6 Compound Y 1.86 56.6 1.8 Ginsenoside Mc 1.86 63.3 2.0 20(S)-protopanaxatriol 1.19 82.4 2.0

Detailed Description Paragraph Table (2):
TABLE 2 Inhibitory activity on the proliferation by intestinal flora metabolites of ginseng saponin IC.sub.50 (.mu.M) IC.sub.50 (C)/IC.sub.50 (BAE) HL K562 BAE C = HL K562 Compound K 45 26 28 1.7 1.6 Compound Y 83 78 32 2.6 2.6 Ginsenoside Mc 220 480 26 8.5 18 20(S)-protopanaxatriol 280 49 36 7.8 1.4

Detailed Description Paragraph Table (3):
TABLE 3 Migration-inhibition by intestinal flora metabolites of ginseng saponin Migration-inhibition (% control) IC.sub.50 Suramin -3.8 37.1 Compound K 4.6 43.2 Compound Y -3.7 28.9 Ginsenoside Mc -1.6 30.0 20(S)-protopanaxatriol -1.6 30.0

Detailed Description Paragraph Table (4):
TABLE 4 Inhibition on the extravasation of basement membrane by intestinal flora metabolites of ginseng saponin Concentration No. of infiltrated Inhibition (.mu.M) cancer cell/field rate (%) Control 118 .+-. 8 RGDS peptide 4000 61 .+-. 9 48 Compound K 1 73 .+-. 4 38 ED.sub.50 = 3.2 50 10 45 .+-. 9 62 100 0 100 Control 117 .+-. 9 RGDS peptide 4000 51 .+-. 10 56 Compound Y 1 125 .+-. 7 10 92 .+-. 11 21 ED.sub.50 = 31 50 100 24 .+-. 2 62 1000 0 100 Control 117 .+-. 9 RGDS peptide 4000 51 .+-. 10 56 ginsenoside Mc 1 114 .+-. 12 3 ED.sub.50 = 7.6 50 10 44 .+-. 7 62 100 3 .+-. 1 97 1000 0 100 Control 97 .+-. 8 RGDS peptide 4000 49 .+-. 4 49 20(S)-protopanaxatriol 1 103 .+-. 14 10 93 .+-. 7 4 ED.sub.50 = 48 50 100 18 .+-. 4 81 1000 1 .+-. 1 99

Terms	Documents
l1 and sapogenin	15

Display Format: [ ] Change Format

Previous Page Next Page

f Chemistry and Molecular Engi[illegible]ring, Peking University, Beljing, 100871, Pe[illegible] Rep. China

SOURCE: Huaxue Xuebao (2001), 59(10), 1614-1618
CODEN: HHHPA4; ISSN: 0567-7351

PUBLISHER: Kexue Chubanshe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB Many peptide constituents were sepd. from the boiling water ext. of **Panax notoginseng** by extn., anion and cation ion exchange resin sepn., and RP-HPLC sepn. methods. Peptide components were predicted to be existed in the boiling water ext. by comparison of the compn. and content of free amino acid and that after hydrolysis. YN-3H12 obtained from the boiling water ext. of **Panax notoginseng** was identified as reduced glutathione by amino acid anal., two dimensional chromatogram of polyacrylamide film, C-terminal anal. by carboxypeptidase digestion and mass chromatog. anal. The compd. YN-3H11 was detd. as adenine by anal. of its 1H-, 13C-NMR, MS spectra and by comparison with an authentic sample. This expt. provided an effective method to study the water-sol. peptide compds. and other bioactive components in the plants.

L13 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS.

ACCESSION NUMBER: 1994:279955 CAPLUS
DOCUMENT NUMBER: 120:279955
TITLE: Adsorption properties of a new polymeric adsorbent S-038 for gypenosides and its applications in the **isolation** and purification of natural saponins respectively from an aqueous **extract** of Gynostemma pentaphyllum Makino and **Panax notoginseng**
AUTHOR(S): Ma Jianbiao; Wang Limin; Li Jianmin; Zhao Cunxiang; Shi Zuoqing; He Binglin
CORPORATE SOURCE: Inst. Polym. Chem., Nankai Univ., Tianjin, 300071, Peop. Rep. China
SOURCE: Lizi Jiaohuan Yu Xifu (1993), 9(2), 97-101
CODEN: LJYXE5; ISSN: 1001-5493
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB Some dammarane-type saponins are used as drugs and additives of health food. In order to develop a new technol. for the **isolation** and purifn. of the saponins, the adsorption properties of a new polymeric adsorbent S-038 for gypenosides were studied. It was found that the adsorption capacities of the adsorbent were up to 18 5mg/g in the batch test and 196.5 mg/g in the column test when it adsorbed gypenosides at the concn. of 2.426 mg/mL in an aq. soln. The expts. in its applications showed that the adsorbent was a suitable one for the enrichment, **isolation**, and purifn. of natural saponins from an aq. ext. of Gynostemma pentaphyllum Makino or **Panax notoginseng** (Burk.) F. H. Chen.

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L1 1 S JP 61024597/PN
L2 2010 S SAPOGENINS

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L4 0 L2 AND GINSENOSIDES EXTRACT

=> s l2 and s ginsenoside extract
2362567 S
1586 GINSENOSIDE
23493 EXTRACT
0 S GINSENOSIDE EXTRACT
(S(W)GINSENOSIDE(W)EXTRACT)
L5 0 L2 AND S GINSENOSIDE EXTRACT

=> s l2 and s ginsenoside
2362567 S
1586 GINSENOSIDE
43 S GINSENOSIDE
(S(W)GINSENOSIDE)
L6 1 L2 AND S GINSENOSIDE

=> d l6 ibib hitstr abs

L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1985:447833 CAPLUS
DOCUMENT NUMBER: 103:47833
TITLE: Validity of the Oriental medicines. 73. Liver-protective drugs. 18. Antihepatotoxic actions of ginsenosides from Panax ginseng roots
AUTHOR(S): Hikino, Hiroshi; Kiso, Yoshinobu; Kinouchi, Junko; Sanada, Shuichi; Shoji, Junzo
CORPORATE SOURCE: Pharm. Inst., Tohoku Univ., Sendai, Japan
SOURCE: Planta Medica (1985), (1), 62-4
CODEN: PLMEAA; ISSN: 0032-0943
DOCUMENT TYPE: Journal
LANGUAGE: English
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L1 1 S JP 61024597/PN
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L3 0 S L2 AND GINSENOSIDE EXTRACT
L4 0 S L2 AND GINSENOSIDES EXTRACT
L5 0 S L2 AND S GINSENOSIDE EXTRACT
L6 1 S L2 AND S GINSENOSIDE

=> s panax
L7 3094 PANAX

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L8         106 L7 AND EXTRACT

=> s l8 and sapogenin
          1615 SAPOGENIN
L9           0 L8 AND SAPOGENIN

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L10         62 L8 AND PANAX GINSENG

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                 (PANAX(W)QUINGUEFOL)
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=> s l8 and notoginseng
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L12          9 L8 AND NOTOGINSENG

=> s l12 and isolation
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L13          2 L12 AND ISOLATION

=> d l13 1-2 ibib hitstr abs

L13  ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         2001:814919  CAPLUS
DOCUMENT NUMBER:          136:66965
TITLE:                    Isolation and identification of reduced
                          glutathione and adenine in the boiling water
                          extract of Panax notoginseng
AUTHOR(S):                Ji, Jian-Guo; Ye, Yun-Hua; Xing, Qi-Yi
CORPORATE SOURCE:         The Key Laboratory of Bioorganic Chemistry and
                          Molecular Engineering, Ministry of Education, College
                          of Chemistry and Molecular Engineering, Peking
                          University, Beljing, 100871, Peop. Rep. China
SOURCE:                   Huaxue Xuebao (2001), 59(10), 1614-1618
                          CODEN: HHHPA4; ISSN: 0567-7351
PUBLISHER:                Kexue Chubanshe
DOCUMENT TYPE:            Journal
LANGUAGE:                 Chinese
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     exchange resin sepn., and RP-HPLC sepn. methods.  Peptide components were
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     compn. and content of free amino acid and that after hydrolysis.  YN-3H12
     obtained from the boiling water ext. of Panax
     notoginseng was identified as reduced glutathione by amino acid
     anal., two dimensional chromatogram of polyacrylamide film, C-terminal
     anal. by carboxypeptidase digestion and mass chromatog. anal. The compd.
     YN-3H11 was detd. as adenine by anal. of its 1H-, 13C-NMR, MS spectra and
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by comparison with an authentic sample. This expt. provided an effective method to study the water-sol. peptide compds. and other bioactive components in the plants.

L13 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1994:279955 CAPLUS
DOCUMENT NUMBER: 120:279955
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AUTHOR(S): Ma Jianbiao; Wang Limin; Li Jianmin; Zhao Cunxiang; Shi Zuoqing; He Binglin
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NEWS EXPRESS January 6 CURRENT WINDOWS VERSION IS V6.01a,
CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002
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NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

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FILE COVERS 1907 - 7 Feb 2003 VOL 138 ISS 7
FILE LAST UPDATED: 6 Feb 2003 (20030206/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s JP 61024597/pn
L1 1 JP 61024597/PN
(JP61024597/PN)

=> d l1 ibib hitstr abs

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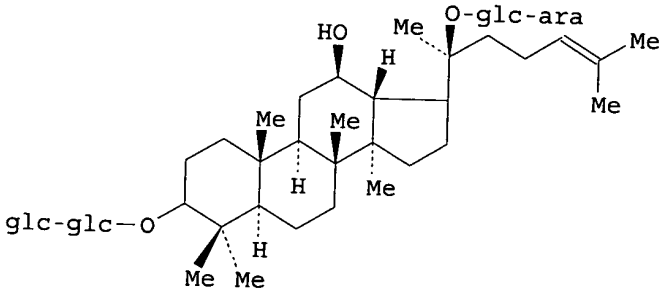
L1 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1986:546237 CAPLUS
DOCUMENT NUMBER: 105:146237
TITLE: Ginsenoside Rb2 as antidiabetic
INVENTOR(S): Kawashima, Yuji; Ora, Hikokichi; Yokozawa, Takako
PATENT ASSIGNEE(S): Yamanouchi Pharmaceutical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61024597	A2	19860203	JP 1984-145189	19840712 <--
JP 03069328	B4	19911031		

PRIORITY APPLN. INFO.: JP 1984-145189 19840712
GI



I

AB Ginsenoside Rb2 (I; glc = .beta.-D-glucose residue, ara = .alpha.-L-arabinopyranose residue) is useful as an antidiabetic. Thus, a soln. of 10 mg I in 0.5 mL saline was injected in rats i.p. to show a blood sugar level of 573.8 .+-. 18.9 mg/dL after 12 h, vs. 704.8 .+-. 31.6 mg/dL with a control.

=> s sapogenins
L2 2010 SAPOGENINS

=> s l2 and ginsenoside extract
1586 GINSENOSIDE
23493 EXTRACT
0 GINSENOSIDE EXTRACT
(GINSENOSIDE(W)EXTRACT)
L3 0 L2 AND GINSENOSIDE EXTRACT

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1165 GINSENOSIDES
23493 EXTRACT
0 GINSENOSIDES EXTRACT
(GINSENOSIDES(W)EXTRACT)

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L4 0 L2 AND GINSENOSIDES EXTRACT

=> s l2 and s ginsenoside extract
2362567 S
1586 GINSENOSIDE
23493 EXTRACT
0 S GINSENOSIDE EXTRACT
(S(W)GINSENOSIDE(W)EXTRACT)
L5 0 L2 AND S GINSENOSIDE EXTRACT

=> s l2 and s ginsenoside
2362567 S
1586 GINSENOSIDE
43 S GINSENOSIDE
(S(W)GINSENOSIDE)
L6 1 L2 AND S GINSENOSIDE

=> d l6 ibib hitstr abs

L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1985:447833 CAPLUS
DOCUMENT NUMBER: 103:47833
TITLE: Validity of the Oriental medicines. 73. Liver-protective drugs. 18. Antihepatotoxic actions of ginsenosides from Panax ginseng roots
AUTHOR(S): Hikino, Hiroshi; Kiso, Yoshinobu; Kinouchi, Junko; Sanada, Shuichi; Shoji, Junzo
CORPORATE SOURCE: Pharm. Inst., Tohoku Univ., Sendai, Japan
SOURCE: Planta Medica (1985), (1), 62-4
CODEN: PLMEAA; ISSN: 0032-0943
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The antihepatotoxic effect of ginsenosides, saponins from P. ginseng, and their aglycons were investigated utilizing CCl4- and galactosamine (GalN)-induced cytotoxicity in primary cultured rat hepatocytes. 20(**S**)-**Ginsenoside**-Rh2 [78214-33-2], 20(R)-ginsenoside-Rg3 [38243-03-7] and prosapogenin of ginsenoside-Ro, 20(R)- and 20(**S**)-**ginsenoside**-Rs were effective in preventing CCl4-induced cytotoxicity. 20(**S**)-**Ginsenoside**-Rh1 [63223-86-9] and prosapogenin of 20(**S**)-**ginsenoside**-Rs were effective in preventing GalN-induced liver cell damage. The antihepatoxic effects of chikusetsusaponins, saponins of P. japonicus, were also examd. The structure-activity relationship is discussed.

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L4 0 S L2 AND GINSENOSIDES EXTRACT
L5 0 S L2 AND S GINSENOSIDE EXTRACT
L6 1 S L2 AND S GINSENOSIDE

=> s panax
L7 3094 PANAX

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CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002
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FILE COVERS 1907 - 7 Feb 2003 VOL 138 ISS 7
FILE LAST UPDATED: 6 Feb 2003 (20030206/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s JP 61024597/pn
L1 1 JP 61024597/PN
(JP61024597/PN)

=> d l1 ibib hitstr abs

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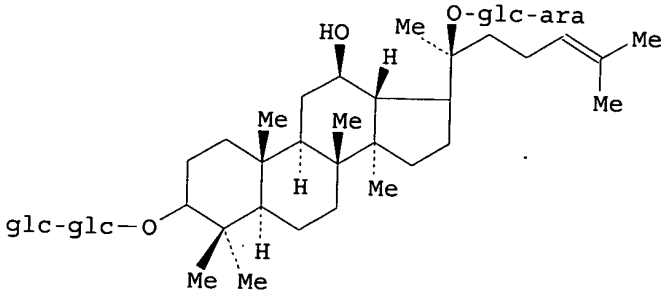
L1 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1986:546237 CAPLUS
DOCUMENT NUMBER: 105:146237
TITLE: Ginsenoside Rb2 as antidiabetic
INVENTOR(S): Kawashima, Yuji; Ora, Hikokichi; Yokozawa, Takako
PATENT ASSIGNEE(S): Yamanouchi Pharmaceutical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61024597	A2	19860203	JP 1984-145189	19840712 <--
JP 03069328	B4	19911031		

PRIORITY APPLN. INFO.: JP 1984-145189 19840712
GI



I

AB Ginsenoside Rb2 (I; glc = .beta.-D-glucose residue, ara = .alpha.-L-arabinopyranose residue) is useful as an antidiabetic. Thus, a soln. of 10 mg I in 0.5 mL saline was injected in rats i.p. to show a blood sugar level of 573.8 .+-. 18.9 mg/dL after 12 h, vs. 704.8 .+-. 31.6 mg/dL with a control.

=> s sapogenins
L2 2010 SAPOGENINS

=> s l2 and ginsenoside extract
1586 GINSENOSIDE
23493 EXTRACT
0 GINSENOSIDE EXTRACT
(GINSENOSIDE(W)EXTRACT)
L3 0 L2 AND GINSENOSIDE EXTRACT

=> s l2 and ginsenosides extract
1165 GINSENOSIDES
23493 EXTRACT
0 GINSENOSIDES EXTRACT
(GINSENOSIDES(W)EXTRACT)

09982018

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=> s l7 and extract
         23493 EXTRACT
L8         106 L7 AND EXTRACT

=> s l8 and sapogenin
          1615 SAPOGENIN
L9           0 L8 AND SAPOGENIN

=> s l8 and panax ginseng
          3094 PANAX
          4806 GINSENG
          1475 PANAX GINSENG
                 (PANAX(W)GINSENG)
L10         62 L8 AND PANAX GINSENG

=> s l8 and panax quinguefol
          3094 PANAX
             0 QUINGUEFOL
             0 PANAX QUINGUEFOL
                 (PANAX(W)QUINGUEFOL)
L11          0 L8 AND PANAX QUINGUEFOL

=> s l8 and notoginseng
           357 NOTOGINSENG
L12          9 L8 AND NOTOGINSENG

=> s l12 and isolation
        214592 ISOLATION
L13          2 L12 AND ISOLATION

=> d l13 1-2 ibib hitstr abs

L13  ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         2001:814919  CAPLUS
DOCUMENT NUMBER:          136:66965
TITLE:                    Isolation and identification of reduced
                          glutathione and adenine in the boiling water
                          extract of Panax notoginseng
AUTHOR(S):                Ji, Jian-Guo; Ye, Yun-Hua; Xing, Qi-Yi
CORPORATE SOURCE:         The Key Laboratory of Bioorganic Chemistry and
                          Molecular Engineering, Ministry of Education, College
                          of Chemistry and Molecular Engineering, Peking
                          University, Beljing, 100871, Peop. Rep. China
SOURCE:                   Huaxue Xuebao (2001), 59(10), 1614-1618
                          CODEN: HHHPA4; ISSN: 0567-7351
PUBLISHER:                Kexue Chubanshe
DOCUMENT TYPE:            Journal
LANGUAGE:                 Chinese
AB   Many peptide constituents were sepd. from the boiling water ext. of
     Panax notoginseng by extn., anion and cation ion
     exchange resin sepn., and RP-HPLC sepn. methods.  Peptide components were
     predicted to be existed in the boiling water ext. by comparison of the
     compn. and content of free amino acid and that after hydrolysis.  YN-3H12
     obtained from the boiling water ext. of Panax
     notoginseng was identified as reduced glutathione by amino acid
     anal., two dimensional chromatogram of polyacrylamide film, C-terminal
     anal. by carboxypeptidase digestion and mass chromatog. anal. The compd.
     YN-3H11 was detd. as adenine by anal. of its 1H-, 13C-NMR, MS spectra and
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by comparison with an authentic sample. This expt. provided an effective method to study the water-sol. peptide compds. and other bioactive components in the plants.

L13 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1994:279955 CAPLUS
DOCUMENT NUMBER: 120:279955
TITLE: Adsorption properties of a new polymeric adsorbent S-038 for gypenosides and its applications in the **isolation** and purification of natural saponins respectively from an aqueous **extract** of Gynostemma pentaphyllum Makino and **Panax notoginseng**
AUTHOR(S): Ma Jianbiao; Wang Limin; Li Jianmin; Zhao Cunxiang; Shi Zuoqing; He Binglin
CORPORATE SOURCE: Inst. Polym. Chem., Nankai Univ., Tianjin, 300071, Peop. Rep. China
SOURCE: Lizi Jiaohuan Yu Xifu (1993), 9(2), 97-101
CODEN: LJYXE5; ISSN: 1001-5493
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB Some dammarane-type saponins are used as drugs and additives of health food. In order to develop a new technol. for the **isolation** and purifn. of the saponins, the adsorption properties of a new polymeric adsorbent S-038 for gypenosides were studied. It was found that the adsorption capacities of the adsorbent were up to 18 5mg/g in the batch test and 196.5 mg/g in the column test when it adsorbed gypenosides at the concn. of 2.426 mg/mL in an aq. soln. The expts. in its applications showed that the adsorbent was a suitable one for the enrichment, **isolation**, and purifn. of natural saponins from an aq. ext. of Gynostemma pentaphyllum Makino or **Panax notoginseng** (Burk.) F. H. Chen.

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(FILE 'HOME' ENTERED AT 22:36:10 ON 07 FEB 2003)

FILE 'CAPLUS' ENTERED AT 22:36:16 ON 07 FEB 2003
L1 1 S JP 61024597/PN
L2 2010 S SAPOGENINS
L3 0 S L2 AND GINSENOSIDE EXTRACT
L4 0 S L2 AND GINSENOSIDES EXTRACT
L5 0 S L2 AND S GINSENOSIDE EXTRACT
L6 1 S L2 AND S GINSENOSIDE
L7 3094 S PANAX
L8 106 S L7 AND EXTRACT
L9 0 S L8 AND SAPOGENIN
L10 62 S L8 AND PANAX GINSENG
L11 0 S L8 AND PANAX QUINGUEFOL
L12 9 S L8 AND NOTOGINSENG
L13 2 S L12 AND ISOLATION

=> s saponins
L14 10790 SAPONINS

=> s l14 and ginsenoside
1586 GINSENOSIDE

09982018

L15 569 L14 AND GINSENOSIDE

=> s l15 and extract
23493 EXTRACT
L16 16 L15 AND EXTRACT

=> d l16 1-2 ibib hitstr abs

L16 ANSWER 1 OF 16 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:631440 CAPLUS
DOCUMENT NUMBER: 133:207128
TITLE: Coffee beverages containing herbal **extract**, and their manufacture
INVENTOR(S): Takahashi, Yoshinobu; Kuboyama, Morio
PATENT ASSIGNEE(S): Meidi-Ya Food Factory Co., Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000245348	A2	20000912	JP 1999-50341	19990226

PRIORITY APPLN. INFO.: JP 1999-50341 19990226
AB Coffee beverages contain 1-200 wt.% (as solids, based on caffeine) herbal exts. such as Acanthopanax senticosus ext., Panax ginseng ext., Panax notoginseng ext., and Panax quinquefolium ext. **Saponins** or triterpenes of the exts. prolong waking effect of caffeine.

L16 ANSWER 2 OF 16 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:616610 CAPLUS
DOCUMENT NUMBER: 133:198422
TITLE: Foundations containing crosslinked polysiloxanes and Panax ginseng **extract**
INVENTOR(S): Kadota, Akimi
PATENT ASSIGNEE(S): Enteam K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000239124	A2	20000905	JP 1999-80229	19990217

PRIORITY APPLN. INFO.: JP 1999-80229 19990217
AB The foundations, which show high spreadability and give elasticity to skin, contain crosslinked methylpolysiloxane, decamethylcyclopentasiloxane (I), methylpolysiloxane, and Panax ginseng exts. contg. **ginsenoside saponins**. A foundation contg. crosslinked methylpolysiloxane 73.00, I 10.00, methylpolysiloxane 7.00, P. ginseng ext. 0.01, and other ingredients was prepd. and evaluated by volunteers suffering from decrease in skin elasticity.

=> d l16 3-16 ibib hitstr abs

L16 ANSWER 3 OF 16 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:808545 CAPLUS
DOCUMENT NUMBER: 132:40336
TITLE: Cosmetic or pharmaceutical, particularly dermatological, composition containing a Bertholletia **extract**
INVENTOR(S): Bonte, Frederic; Dumas, Marc; Lavaud, Catherine; Massiot, Georges
PATENT ASSIGNEE(S): Lvmh Recherche, Fr.
SOURCE: U.S., 10 pp., Cont.-in-part of Ser. No. WO96FR-9600256.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6004568	A	19991221	US 1997-917622	19970811
WO 9625143	A1	19960822	WO 1996-FR256	19960216
W: AU, CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
FR 2752527	A1	19980227	FR 1996-10356	19960822
FR 2752527	B1	19981113		
EP 826367	A2	19980304	EP 1997-401946	19970819
EP 826367	A3	19990203		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

PRIORITY APPLN. INFO.:
WO 1996-FR256 A2 19960216
FR 1996-10356 A 19960822
FR 1995-1840 A 19950217

AB The object of the invention is the use of a Bertholletia ext., particularly a Bertholletia excelsa ext., for the prepn. of a cosmetic or pharmaceutical compn., particularly a dermatol. compn. The Bertholletia ext. promotes collagen synthesis or has activity against free radicals, for example to combat the effects of skin aging, to prevent the formation of wrinkles or reduce their depth, or to promote firmer skin. It also has an activity for promoting the incorporation of vitamin C in the skin cells.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:87989 CAPLUS
DOCUMENT NUMBER: 130:301549
TITLE: Controlling hydrolysis of ginseng **saponins** by neutralization of organic acids in red ginseng **extract** preparations
AUTHOR(S): Kim, Cheon Suk; Choi, Kang Ju; Kim, Seok Chang; Ko, Sung Young; Sung, Hyun Soon; Lee, Yong Gu
CORPORATE SOURCE: Korea Ginseng and Tobacco Research Institute, Taejeon, 305-345, S. Korea
SOURCE: Journal of Ginseng Research (1998), 22(3), 205-210
CODEN: JGREF7; ISSN: 1226-8453
PUBLISHER: Korean Society of Ginseng
DOCUMENT TYPE: Journal
LANGUAGE: Korean

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AB Glucosidic bonds at the C20 position of the sapogenins were hydrolyzed easily at lower pH, higher temps., and longer times to give prosapogenins and sugars. The glucosidic bond of saponin at the C3 of **ginsenoside**-Rb1, which is a secondary carbon, was relatively stable due to the low electron d. of -0.2. But the bond of saponin at the C20 position, which is a tertiary carbon with the relatively high electron d. of -0.3, was liable to be hydrolyzed even in weakly acidic soln. by the increase of heating time. On the other hand, red ginseng contained 13.34 mg/g of citric acid, 8.78 mg/g of malonic acid, 3.70 mg/g of oxalic acid, 2.13 mg/g of malic acid, and 0.44 mg/g of succinic acid. Ginseng **saponins** were very stable in ginseng ext. neutralized with sodium carbonate or sodium bicarbonate corresponding to the equiv. amt. of the total org. acid in the red ginseng.

L16 ANSWER 5 OF 16 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:9900 CAPLUS
DOCUMENT NUMBER: 128:93048
TITLE: Changes in chemical components of red ginseng **extract** solution and physicochemical properties of precipitates formed during sterilization and storage
AUTHOR(S): Kim, Na-Mi; Lee, Jong-Tae; Yang, Jae-Won
CORPORATE SOURCE: Korea Ginseng and Tobacco Res. Inst., Taejon, 305-345, S. Korea
SOURCE: Koryo Insam Hakhoechi (1996), 20(1), 54-59
CODEN: KINHEK; ISSN: 1016-2615
PUBLISHER: Society for Korean Ginseng
DOCUMENT TYPE: Journal
LANGUAGE: Korean

AB Red Ginseng exts. soln. was sterilized at 85.degree. for 20 mins and/or stored at 40.degree. for 6 mo and centrifuged for 20 mins at 8,500 x g in order to investigate the changes in chem. components of supernatants and the properties of ppts. Contents of crude saponin and **ginsenoside** -Rb1, -Rg1, -Re were partially decreased during heating and storage. Starch contents were decreased from 26.81 % in red ginseng exts. to 17.50-8.81 % in supernatants, whereas free sugar contents were increased from 15.50 % to 20.29-21.35% by heating and storage. The contents of protein and minerals in supernatants were decreased, but acidic polysaccharides and polyphenol compds. were not changed. PH values of supernatants and ppts. were decreased. The absorbances of brown color precursor and brown pigment in ppts., detected at 285 nm and 440 nm were remarkably increased. The overall data suggest that ppts. in red ginseng exts. soln. formed during sterilization and storage are probably the brown pigments resulting from Maillard reaction of amino compds. with reducing sugar which could be released from starch and protein matrix and Cu+, Ca2+ and Fe3+ ions are implicated with the reaction incorporated.

L16 ANSWER 6 OF 16 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:954795 CAPLUS
DOCUMENT NUMBER: 123:350231
TITLE: Use of **ginsenoside** Ro or a plant **extract** containing same for promotion of collagen synthesis for pharmaceuticals and cosmetics
INVENTOR(S): Meybeck, Alain; Bonte, Frederic; Dumas, Marc; Chaudagne, Catherine
PATENT ASSIGNEE(S): LVMH Recherche, Fr.
SOURCE: PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

09982018

LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9525524	A1	19950928	WO 1995-FR326	19950317
W: CA, CN, JP, KR, MX, RU, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
FR 2717389	A1	19950922	FR 1994-3194	19940318
FR 2717389	B1	19960607		
EP 751777	A1	19970108	EP 1995-914381	19950317
R: BE, CH, DE, ES, FR, GB, IT, LI				
CN 1146153	A	19970326	CN 1995-192639	19950317
JP 10500395	T2	19980113	JP 1995-524426	19950317
US 5747538	A	19980505	US 1996-716363	19960918

PRIORITY APPLN. INFO.: FR 1994-3194 19940318
WO 1995-FR326 19950317

AB The use of **ginsenoside** Ro (I) or a plant ext. contg. same to prep. a cosmetic or pharmaceutical compn., particularly a skin care compn., for promoting collagen synthesis, particularly collagen I and/or collagen III synthesis, is disclosed. A 25% ext. of I was prepd. by refluxing Panax japonicus in MeOH for 4h. A soln. of 10.mu.g/mL I stimulated the collagen I synthesis in cultured fibroblasts by 44%. An ointment for cicatrization of skin wounds contained I 1, vitamin A palmitate 0.05, ZnO 0.1, glycerin 1, and excipients q.s. 100g.

L16 ANSWER 7 OF 16 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1994:426264 CAPLUS
DOCUMENT NUMBER: 121:26264
TITLE: Interactions of ginseng **extract**, ginseng separated fractions, and some triterpenoid **saponins** with glucose transporters in sheep erythrocytes
AUTHOR(S): Hasegawa, Hideo; Matsumiya, Satoshi; Murakami, Chikgar; Kurokawa, Tomonori; Kasai, Ryoji; Ishibashi, Sadahiko; Yamasaki, Kazuo
CORPORATE SOURCE: Itto Inst. Life Sci., Happy World Inc., Fuchu, Japan
SOURCE: Planta Medica (1994), 60(2), 153-7
CODEN: PLMEAA; ISSN: 0032-0943
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The effects of Panax ginseng ext., ginseng **saponins**, and some other triterpenoid **saponins** on glucose uptake were examd. by using sheep erythrocytes. Initial rates of glucose transport were detd. by measurements of 2-deoxy-D-glucose (2-DG) uptake. From kinetic anal. apparent Km and Vmax values of facilitated glucose transport in sheep erythrocytes were calcd. as 2.3 .+-. 0.08 mM and 1.4 .+-. 0.05 nmol/min/10.degree. cells. The results showed that ginseng ext. stimulated glucose uptake in sheep erythrocytes dose-dependently. Ginseng **saponins**, in general, also stimulated glucose transport. The max. effect was obsd. at 1 .mu.M of **ginsenoside** Rb1 showing an increase of 24 .+-. 5% above basal activity. However, **ginsenoside** Rg3, chikusetsusaponin Ia, and glycyrrhetic acid induced significant inhibitory effects on glucose transport in sheep erythrocytes.

L16 ANSWER 8 OF 16 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1992:143812 CAPLUS
DOCUMENT NUMBER: 116:143812

09982018

TITLE: Effect of Panax ginseng **extract** on the production of glycosaminoglycans in cultured human skin fibroblasts
AUTHOR(S): Tanaka, Hiroshi; Nagase, Kenichi; Hirose, Osamu; Okada, Tomio; Konishi, Hiroaki; Tsuji, Takuo
CORPORATE SOURCE: Biochem. Res. Inst., Nippon Menard Cosmet. Co., Ltd., Ogaki, 503, Japan
SOURCE: Nippon Koshohin Kagakkaishi (1991), 15(3), 132-5
CODEN: NKKAEV; ISSN: 0287-1238
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB P. ginseng which is representative of medicinal ginseng was studied for its effect on the prodn. of glycosaminoglycans (GAG) in cultured human skin fibroblasts. GAG was analyzed by measuring [3H]glucosamine incorporation into cetylpyridinium chloride-pptd. GAG. The prodn. of GAG was increased by the addn. of 70% methanol ext. of P. ginseng, this augmentation was obsd. only in saponin fraction. Moreover ginsenosides Rb1, Rb2, Rc, Re, and Rg1 which are major ginseng **saponins** were studied. All of them accelerated the prodn. of GAG, **ginsenoside** Rb2 was found to be esp. effective.

L16 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1984:180164 CAPLUS
DOCUMENT NUMBER: 100:180164
TITLE: Quantitative determination of **saponins** of ginseng **extract**
AUTHOR(S): Shao, Chunjie; Kuang, Haixue; Xu, Jingda
CORPORATE SOURCE: Baiqiuen Med. Univ., Peop. Rep. China
SOURCE: Yaoxue Tongbao (1983), 18(12), 734-6
CODEN: YHTPAD; ISSN: 0512-7343
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB **Saponins** in Ren Shen Jin (a ginseng ext. prepn.) were detd. by colorimetry and their **ginsenoside** contents were qual. detd. by TLC. Thus, 100 mL Ren Shen Jin was evapd. and the residue was dissolved in a small amt. of distd. H2O. The soln. was treated with ether for the removal of fats, ext. with BuOH, and the exts. were pooled, concd. under reduced pressure and redissolved in a minimal amt. of EtOH and dild. to a final vol. of 10 mL. A 3-10 .mu.L aliquot was treated with 0.5 mL vanillin soln. (8%) and 5 mL H2SO4 (77%) at 60.degree. for 10 min, and the reaction mixt. was analyzed at 544 nm for the detn. of total **saponins** (based in ginsenosides Re [52286-59-6] and Rd [52705-93-8]). The recovery was 99.4%. Of 10 samples tested, saponin content ranged 0.210-0.290%. For qual. detn., a sample was chromatographed on a silica gel GF254 plate using BuOH-EtOAc-H2O (4:1:5) as eluent and the plate was dried and treated with 10% H2SO4 at 120.degree. for 3-6 min. The sample contained ginsenosides Ro [34367-04-9], Rb1 [41753-43-9], Rb2 [11021-13-9], Rc [11021-14-0], Rd, Re, Rg1 [22427-39-0], and Rg2 [52286-74-5].

L16 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1983:59993 CAPLUS
DOCUMENT NUMBER: 98:59993
TITLE: Evaluation of 3-aminopropyltriethoxysilane-treated thin-layer chromatographic plates. Application to the analysis of ginseng **extract**
AUTHOR(S): Okamoto, Mitsuyoshi; Matsui, Kenji; Yamada, Fujizo; Noguchi, Mamoru
CORPORATE SOURCE: Gifu Prefect. Inst. Public Health, Gifu, 500, Japan

09982018

SOURCE: Yakugaku Zasshi (1982), 102(11), 1099-102
CODEN: YKKZAJ; ISSN: 0031-6903
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB **Saponins** from Panax ginseng were studied by TLC by using an NH2-chem. bonded stationary phase, prepd. from a precoated silica gel plate treated with a benzene soln. contg. 3-aminopropyltriethoxysilane (3APTS). The TLC plate treated with 3APTS was used for the evaluation of the com. ginseng ext. After development, 3APTS-treated TLC plates were dried, sprayed with H2SO4 soln., and heated. Each saponin spot on the chromatogram was measured with a TLC densitometer equipped with a dual-wavelength TLC scanner at .lambda.S 525 nm (sample) and .lambda.R 760 nm (ref.).

L16 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1981:490833 CAPLUS
DOCUMENT NUMBER: 95:90833
TITLE: Studies on the effect of ginseng **extract** on chick embryonic nerve and muscle cells
AUTHOR(S): Kim, Young Choong; Kim, Eun Kyung
CORPORATE SOURCE: Coll. Pharm., Seoul Natl. Univ., Seoul, 151, S. Korea
SOURCE: Yakhak Hoechi (1980), 24(3-4), 143-50
CODEN: YAHOA3; ISSN: 0513-4234
DOCUMENT TYPE: Journal
LANGUAGE: Korean
AB The effect of ginseng saponin was studied on chick embryonic dorsal root ganglia in organ culture and on brain, spinal cord, and muscle in dissocn. cultures. Fiber outgrowth in explanted chick embryonic dorsal root ganglia was markedly induced by water and alc. exts. of ginseng, total ginseng saponin, and various **ginsenoside** fractions. The life span of the cultured dorsal root ganglia was lengthened and nerve cell d. was increased by all of these ginseng **saponins**. The effect of ginseng saponin on the dorsal root ganglia organ cultures was more marked in the absence of chick embryonic ext., which is known to contain nerve growth factor-like material. However, ginseng saponin did not influence the cultured brain and spinal cord cells and cultured skeletal muscle cells with respect to morphol. changes, maturation, and life span.

L16 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1981:486235 CAPLUS
DOCUMENT NUMBER: 95:86235
TITLE: Quality changes in red ginseng **extract** during high temperature storage
AUTHOR(S): Choi, Jin-Ho; Kim, Woo-Jung; Yang, Jae-Won; Sung, Hyun-Soon; Hong, Soon-Keun
CORPORATE SOURCE: Korea Ginseng and Tobacco Res. Inst., Seoul, S. Korea
SOURCE: Han'guk Nonghwa Hakhoechi (1981), 24(1), 50-8
CODEN: JKACA7; ISSN: 0368-2897
DOCUMENT TYPE: Journal
LANGUAGE: Korean
AB The effect of high temp. storage on the chem. compn. and color intensity of concd. red ginseng ext. (RGE) was investigated. Concd. RGE was prepd. by extn. of red ginseng tails with water and concd. under reduced pressure. Changes in free sugars, saponin patterns and brown color intensity were measured during 96 h of heat treatment at various temps. (60-100.degree.). A decrease in the contents of glucose [50-99-7], fructose [57-48-7] and sucrose [57-50-1] resulted as the brown color intensity increased during the storage. The sugar contents and color intensity showed rapid initial changes followed by decreased changes at

higher temp. A significant relationship was found between sugar content and browning rate. **Saponins**, as detd. by high performance liq. chromatog., particularly in the region of protopanaxtriol, were also affected significantly. The peak heights of ginsenosides Re and Rg1 were decreased while those of **ginsenoside** Rg2 and Rh group were increased.

L16 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1981:436260 CAPLUS
DOCUMENT NUMBER: 95:36260
TITLE: The effect of Korean red ginseng **extract** on the growth of Saccharomyces cerevisiae IAM and Saccharomyces formosensis No. 396 IAM
AUTHOR(S): Sung, Hyun Soon; Nam, Sang Yeal; Kim, Ki Choul
CORPORATE SOURCE: Korea Ginseng Res. Inst., Seoul, S. Korea
SOURCE: Han'guk Nonghwa Hakhoechi (1980), 23(4), 228-41
CODEN: JKACA7; ISSN: 0368-2897
DOCUMENT TYPE: Journal
LANGUAGE: Korean
AB EtOH exts. and **saponins** of red ginseng significantly increased growth, alc. prodn., CO2 evolution, and rate of sugar consumption and fermn. by S. cerevisiae and S. formosensis. Panaxadiol [19666-76-3] had the same effects as ginseng **saponins**. The contents of ginsenosides during the growth of yeast during fermn. was not affected except for a slight increase in **ginsenoside** Rg2 [52286-74-5] and a decrease in **ginsenoside** Rd [52705-93-8].

L16 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1981:52922 CAPLUS
DOCUMENT NUMBER: 94:52922
TITLE: Panax repens **extract** for treatment of diabetes
PATENT ASSIGNEE(S): Institute for Production and Development Science, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 55122724	A2	19800920	JP 1979-29547	19790313

PRIORITY APPLN. INFO.: JP 1979-29547 19790313
AB P. repens Is extd. with water or hydrophilic org. solvents to give a fraction contg. **saponins** for the control of diabetes. **Ginsenoside** [74749-74-9] was identified as the active ingredient. For example, P. repens was chopped, extd. with MeOH and the ext. was concd. under reduced pressure to give a hypoglycemic prepn.

L16 ANSWER 15 OF 16 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1976:95665 CAPLUS
DOCUMENT NUMBER: 84:95665
TITLE: Quantitative analysis of dammarane type **saponins** of ginseng and its application to the evaluation of the commercial ginseng tea and ginseng **extract**
AUTHOR(S): Sakamoto, Ikunori; Morimoto, Kazuyoshi; Tanaka, Osamu

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CORPORATE SOURCE: Hiroshima Prefect. Inst. Public Health, Hiroshima, Japan
SOURCE: Yakugaku Zasshi (1975), 95(12), 1456-61
CODEN: YKKZAJ; ISSN: 0031-6903
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB On hydrolysis with dil. mineral acid, ginseng **saponins**, ginsenosides Rb1, Rb2, Rb3, Rc, and Rd yielded panaxadiol (I) [19666-76-3], and ginsenosides Re, -Rf, -Rg1, and -Rg2 and 20-glucoginsenoside-Rf afforded panaxatriol (II) [32791-84-7]. The optimal condition of saponin hydrolysis for the quant. anal. of I and II was studied. The crude hydrolysates of the MeOH ext. of ginseng were trimethylsilylated with N-trimethylsilylimidazole and the saponin content was calibrated by the gas chromatog. detn. of TMS-I and TMS-II, using diacetylhederagenin Me ester as the internal std. This procedure was applied to the evaluation of the com. ginseng tea and ginseng ext.

L16 ANSWER 16 OF 16 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1975:508336 CAPLUS
DOCUMENT NUMBER: 83:108336
TITLE: Biochemical action of ginseng saponin. I. Purification from ginseng **extract** of the active component stimulating serum protein biosynthesis
AUTHOR(S): Oura, Hikokichi; Hiai, Susumu; Odaka, Yoshihiro; Yokozawa, Takako
CORPORATE SOURCE: Res. Inst. Wakan-Yaku, Toyama Univ., Toyama, Japan
SOURCE: Journal of Biochemistry (Tokyo, Japan) (1975), 77(5), 1057-65
CODEN: JOBIAO; ISSN: 0021-924X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Systematic isolation and purifn. of the biol. active component of ginseng ext. were followed by observing the incorporation of labeled leucine into serum protein at 6 hr after a single intraperitoneal injection in a mouse. Ginseng saponin mixt. (fraction 5) exhibited high activity for such incorporation. Seven **saponins** were isolated from fraction 5. Administration of all these **saponins** (**ginsenoside**-Rb2 [11021-13-9], Rc [11021-14-0], Rc2 [56258-17-4], Rd [52705-93-8], Re [52286-59-6], and Rg1 [22427-39-0]), except for **ginsenoside**-Rb1 [41753-43-9], caused an increase of leucine incorporation over that in control animals. The incorporation rate was directly proportional to the dose in the case of **ginsenoside**-Rd, which had the highest activity. The increased sp. radioactivity of serum protein was not due to a decrease in the pool size of free amino acids in the liver. Thus the active component stimulating serum protein biosynthesis is saponin.

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L4 0 L2 AND GINSENOSIDES EXTRACT

=> s l2 and s ginsenoside extract
2362567 S
1586 GINSENOSIDE
23493 EXTRACT
0 S GINSENOSIDE EXTRACT
(S(W)GINSENOSIDE(W)EXTRACT)
L5 0 L2 AND S GINSENOSIDE EXTRACT

=> s l2 and s ginsenoside
2362567 S
1586 GINSENOSIDE
43 S GINSENOSIDE
(S(W)GINSENOSIDE)
L6 1 L2 AND S GINSENOSIDE

=> d l6 ibib hitstr abs

L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1985:447833 CAPLUS
DOCUMENT NUMBER: 103:47833
TITLE: Validity of the Oriental medicines. 73. Liver-protective drugs. 18. Antihepatotoxic actions of ginsenosides from Panax ginseng roots
AUTHOR(S): Hikino, Hiroshi; Kiso, Yoshinobu; Kinouchi, Junko; Sanada, Shuichi; Shoji, Junzo
CORPORATE SOURCE: Pharm. Inst., Tohoku Univ., Sendai, Japan
SOURCE: Planta Medica (1985), (1), 62-4
CODEN: PLMEAA; ISSN: 0032-0943
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The antihepatotoxic effect of ginsenosides, saponins from P. ginseng, and their aglycons were investigated utilizing CCl4- and galactosamine (GalN)-induced cytotoxicity in primary cultured rat hepatocytes. 20(**S**)-**Ginsenoside**-Rh2 [78214-33-2], 20(R)-ginsenoside-Rg3 [38243-03-7] and prosapogenin of ginsenoside-Ro, 20(R)- and 20(**S**)-**ginsenoside**-Rs were effective in preventing CCl4-induced cytotoxicity. 20(**S**)-**Ginsenoside**-Rh1 [63223-86-9] and prosapogenin of 20(**S**)-**ginsenoside**-Rs were effective in preventing GalN-induced liver cell damage. The antihepatoxic effects of chikusetsusaponins, saponins of P. japonicus, were also examd. The structure-activity relationship is discussed.

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NEWS 11	Jun 10	PCTFULL has been reloaded
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NEWS 13	Jul 22	USAN to be reloaded July 28, 2002; saved answer sets no longer valid
NEWS 14	Jul 29	Enhanced polymer searching in REGISTRY
NEWS 15	Jul 30	NETFIRST to be removed from STN
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NEWS 17	Aug 08	PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 18	Aug 08	NTIS has been reloaded and enhanced
NEWS 19	Aug 19	Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN
NEWS 20	Aug 19	IFIPAT, IFICDB, and IFIUDB have been reloaded
NEWS 21	Aug 19	The MEDLINE file segment of TOXCENTER has been reloaded
NEWS 22	Aug 26	Sequence searching in REGISTRY enhanced
NEWS 23	Sep 03	JAPIO has been reloaded and enhanced
NEWS 24	Sep 16	Experimental properties added to the REGISTRY file
NEWS 25	Sep 16	CA Section Thesaurus available in CAPLUS and CA
NEWS 26	Oct 01	CASREACT Enriched with Reactions from 1907 to 1985
NEWS 27	Oct 21	EVENTLINE has been reloaded
NEWS 28	Oct 24	BEILSTEIN adds new search fields
NEWS 29	Oct 24	Nutraceuticals International (NUTRACEUT) now available on STN
NEWS 30	Oct 25	MEDLINE SDI run of October 8, 2002
NEWS 31	Nov 18	DKILIT has been renamed APOLLIT
NEWS 32	Nov 25	More calculated properties added to REGISTRY
NEWS 33	Dec 02	TIBKAT will be removed from STN
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NEWS 36	Dec 17	TOXCENTER enhanced with additional content
NEWS 37	Dec 17	Adis Clinical Trials Insight now available on STN
NEWS 38	Dec 30	ISMEC no longer available
NEWS 39	Jan 13	Indexing added to some pre-1967 records in CA/CAPLUS
NEWS 40	Jan 21	NUTRACEUT offering one free connect hour in February 2003
NEWS 41	Jan 21	PHARMAML offering one free connect hour in February 2003
NEWS 42	Jan 29	Simultaneous left and right truncation added to COMPENDEX, ENERGY, INSPEC

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CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002
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=> s JP 61024597/pn
L1 1 JP 61024597/PN
(JP61024597/PN)

=> d l1 ibib hitstr abs

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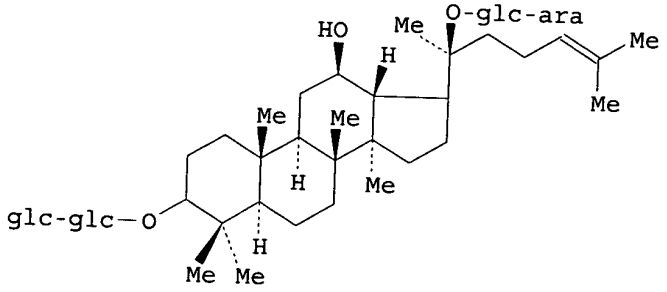
L1 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1986:546237 CAPLUS
DOCUMENT NUMBER: 105:146237
TITLE: Ginsenoside Rb2 as antidiabetic
INVENTOR(S): Kawashima, Yuji; Ora, Hikokichi; Yokozawa, Takako
PATENT ASSIGNEE(S): Yamanouchi Pharmaceutical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61024597	A2	19860203	JP 1984-145189	19840712 <--
JP 03069328	B4	19911031		

PRIORITY APPLN. INFO.: JP 1984-145189 19840712
GI



I

AB Ginsenoside Rb2 (I; glc = .beta.-D-glucose residue, ara = .alpha.-L-arabinopyranose residue) is useful as an antidiabetic. Thus, a soln. of 10 mg I in 0.5 mL saline was injected in rats i.p. to show a blood sugar level of 573.8 .+-. 18.9 mg/dL after 12 h, vs. 704.8 .+-. 31.6 mg/dL with a control.

=> s sapogenins
L2 2010 SAPOGENINS

=> s l2 and ginsenoside extract
1586 GINSENOSIDE
23493 EXTRACT
0 GINSENOSIDE EXTRACT
(GINSENOSIDE(W)EXTRACT)
L3 0 L2 AND GINSENOSIDE EXTRACT

=> s l2 and ginsenosides extract
1165 GINSENOSIDES
23493 EXTRACT
0 GINSENOSIDES EXTRACT
(GINSENOSIDES(W)EXTRACT)

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7/24/01

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=> s sapogenins
L2          2010 SAPOGENINS

=> s l2 and ginsenoside extract
            1586 GINSENOSIDE
           23493 EXTRACT
               0 GINSENOSIDE EXTRACT
                   (GINSENOSIDE(W)EXTRACT)
L3             0 L2 AND GINSENOSIDE EXTRACT

=> s l2 and ginsenosides extract
            1165 GINSENOSIDES
           23493 EXTRACT
               0 GINSENOSIDES EXTRACT
                   (GINSENOSIDES(W)EXTRACT)
L4             0 L2 AND GINSENOSIDES EXTRACT

=> s l2 and s ginsenoside extract
         2362567 S
            1586 GINSENOSIDE
           23493 EXTRACT
               0 S GINSENOSIDE EXTRACT
                   (S(W)GINSENOSIDE(W)EXTRACT)
L5             0 L2 AND S GINSENOSIDE EXTRACT

=> s l2 and s ginsenoside
         2362567 S
            1586 GINSENOSIDE
              43 S GINSENOSIDE
                   (S(W)GINSENOSIDE)
L6             1 L2 AND S GINSENOSIDE

=> d l6 ibib hitstr abs

L6   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:          1985:447833  CAPLUS
DOCUMENT NUMBER:           103:47833
TITLE:                     Validity of the Oriental medicines.  73.
                           Liver-protective drugs.  18.  Antihepatotoxic actions
                           of ginsenosides from Panax ginseng roots
AUTHOR(S):                 Hikino, Hiroshi; Kiso, Yoshinobu; Kinouchi, Junko;
                           Sanada, Shuichi; Shoji, Junzo
CORPORATE SOURCE:          Pharm. Inst., Tohoku Univ., Sendai, Japan
SOURCE:                    Planta Medica (1985), (1), 62-4
                           CODEN: PLMEAA; ISSN: 0032-0943
DOCUMENT TYPE:             Journal
LANGUAGE:                  English
AB   The antihepatotoxic effect of ginsenosides, saponins from P. ginseng, and
     their aglycons were investigated utilizing CCl4- and galactosamine
     (GalN)-induced cytotoxicity in primary cultured rat hepatocytes.  20(
     S)-Ginsenoside-Rh2  [78214-33-2], 20(R)-ginsenoside-Rg3
     [38243-03-7] and prosapogenin of ginsenoside-Ro, 20(R)- and 20(S
     )-ginsenoside-Rs were effective in preventing CCl4-induced
     cytotoxicity.  20(S)-Ginsenoside-Rh1  [63223-86-9] and
     prosapogenin of 20(S)-ginsenoside-Rs were effective in
     preventing GalN-induced liver cell damage.  The antihepatoxic effects of
     chikusetsusaponins, saponins of P. japonicus, were also examd.  The
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structure-activity relationship is discussed.

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FILE 'CAPLUS' ENTERED AT 22:36:16 ON 07 FEB 2003
L1 1 S JP 61024597/PN
L2 2010 S SAPOGENINS
L3 0 S L2 AND GINSENOSIDE EXTRACT
L4 0 S L2 AND GINSENOSIDES EXTRACT
L5 0 S L2 AND S GINSENOSIDE EXTRACT
L6 1 S L2 AND S GINSENOSIDE

=> s panax
L7 3094 PANAX

=> s l7 and extract
23493 EXTRACT
L8 106 L7 AND EXTRACT

=> s l8 and sapogenin
1615 SAPOGENIN
L9 0 L8 AND SAPOGENIN

=> s l8 and panax ginseng
3094 PANAX
4806 GINSENG
1475 PANAX GINSENG
(PANAX(W)GINSENG)
L10 62 L8 AND PANAX GINSENG

=> s l8 and panax quinguefol
3094 PANAX
0 QUINGUEFOL
0 PANAX QUINGUEFOL
(PANAX(W)QUINGUEFOL)
L11 0 L8 AND PANAX QUINGUEFOL

=> s l8 and notoginseng
357 NOTOGINSENG
L12 9 L8 AND NOTOGINSENG

=> s l12 and isolation
214592 ISOLATION
L13 2 L12 AND ISOLATION

=> d l13 1-2 ibib hitstr abs

L13 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:814919 CAPLUS
DOCUMENT NUMBER: 136:66965
TITLE: **Isolation** and identification of reduced glutathione and adenine in the boiling water **extract** of **Panax notoginseng**
AUTHOR(S): Ji, Jian-Guo; Ye, Yun-Hua; Xing, Qi-Yi
CORPORATE SOURCE: The Key Laboratory of Bioorganic Chemistry and Molecular Engineering, Ministry of Education, College

of Chemistry and Molecular Engineering, Peking University, Beljing, 100871, Peop. Rep. China
SOURCE: Huaxue Xuebao (2001), 59(10), 1614-1618
CODEN: HHHPA4; ISSN: 0567-7351
PUBLISHER: Kexue Chubanshe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB Many peptide constituents were sepd. from the boiling water ext. of **Panax notoginseng** by extn., anion and cation ion exchange resin sepn., and RP-HPLC sepn. methods. Peptide components were predicted to be existed in the boiling water ext. by comparison of the compn. and content of free amino acid and that after hydrolysis. YN-3H12 obtained from the boiling water ext. of **Panax notoginseng** was identified as reduced glutathione by amino acid anal., two dimensional chromatogram of polyacrylamide film, C-terminal anal. by carboxypeptidase digestion and mass chromatog. anal. The compd. YN-3H11 was detd. as adenine by anal. of its 1H-, 13C-NMR, MS spectra and by comparison with an authentic sample. This expt. provided an effective method to study the water-sol. peptide compds. and other bioactive components in the plants.

L13 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1994:279955 CAPLUS
DOCUMENT NUMBER: 120:279955
TITLE: Adsorption properties of a new polymeric adsorbent S-038 for gypenosides and its applications in the **isolation** and purification of natural saponins respectively from an aqueous **extract** of Gynostemma pentaphyllum Makino and **Panax notoginseng**
AUTHOR(S): Ma Jianbiao; Wang Limin; Li Jianmin; Zhao Cunxiang; Shi Zuoqing; He Binglin
CORPORATE SOURCE: Inst. Polym. Chem., Nankai Univ., Tianjin, 300071, Peop. Rep. China
SOURCE: Lizi Jiaohuan Yu Xifu (1993), 9(2), 97-101
CODEN: LJYXE5; ISSN: 1001-5493
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB Some dammarane-type saponins are used as drugs and additives of health food. In order to develop a new technol. for the **isolation** and purifn. of the saponins, the adsorption properties of a new polymeric adsorbent S-038 for gypenosides were studied. It was found that the adsorption capacities of the adsorbent were up to 18 5mg/g in the batch test and 196.5 mg/g in the column test when it adsorbed gypenosides at the concn. of 2.426 mg/mL in an aq. soln. The expts. in its applications showed that the adsorbent was a suitable one for the enrichment, **isolation**, and purifn. of natural saponins from an aq. ext. of Gynostemma pentaphyllum Makino or **Panax notoginseng** (Burk.) F. H. Chen.

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FILE 'CAPLUS' ENTERED AT 22:36:16 ON 07 FEB 2003
L1 1 S JP 61024597/PN
L2 2010 S SAPOGENINS

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L3            0 S L2 AND GINSENOSIDE EXTRACT
L4            0 S L2 AND GINSENOSIDES EXTRACT
L5            0 S L2 AND S GINSENOSIDE EXTRACT
L6            1 S L2 AND S GINSENOSIDE
L7         3094 S PANAX
L8          106 S L7 AND EXTRACT
L9            0 S L8 AND SAPOGENIN
L10          62 S L8 AND PANAX GINSENG
L11           0 S L8 AND PANAX QUINGUEFOL
L12           9 S L8 AND NOTOGINSENG
L13           2 S L12 AND ISOLATION

=> s saponins
L14       10790 SAPONINS

=> s l14 and ginsenoside
          1586 GINSENOSIDE
L15        569 L14 AND GINSENOSIDE

=> s l15 and extract
         23493 EXTRACT
L16         16 L15 AND EXTRACT

=> d l16 1-2 ibib hitstr abs

L16  ANSWER 1 OF 16  CAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         2000:631440  CAPLUS
DOCUMENT NUMBER:          133:207128
TITLE:                    Coffee beverages containing herbal extract,
                          and their manufacture
INVENTOR(S):              Takahashi, Yoshinobu; Kuboyama, Morio
PATENT ASSIGNEE(S):       Meidi-Ya Food Factory Co., Ltd, Japan
SOURCE:                   Jpn. Kokai Tokkyo Koho, 4 pp.
                          CODEN: JKXXAF
DOCUMENT TYPE:            Patent
LANGUAGE:                 Japanese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE          APPLICATION NO.  DATE
     ---------------   ----  --------      ---------------  --------
     JP 2000245348      A2   20000912      JP 1999-50341    19990226
PRIORITY APPLN. INFO.:                    JP 1999-50341    19990226
AB   Coffee beverages contain 1-200 wt.% (as solids, based on caffeine) herbal
     exts. such as Acanthopanax senticosus ext., Panax ginseng ext., Panax
     notoginseng ext., and Panax quinquefolium ext. Saponins or
     triterpenes of the exts. prolong waking effect of caffeine.

L16  ANSWER 2 OF 16  CAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         2000:616610  CAPLUS
DOCUMENT NUMBER:          133:198422
TITLE:                    Foundations containing crosslinked polysiloxanes and
                          Panax ginseng extract
INVENTOR(S):              Kadota, Akimi
PATENT ASSIGNEE(S):       Enteam K. K., Japan
SOURCE:                   Jpn. Kokai Tokkyo Koho, 4 pp.
                          CODEN: JKXXAF
DOCUMENT TYPE:            Patent
LANGUAGE:                 Japanese
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FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000239124	A2	20000905	JP 1999-80229	19990217

PRIORITY APPLN. INFO.: JP 1999-80229 19990217

AB The foundations, which show high spreadability and give elasticity to skin, contain crosslinked methylpolysiloxane, decamethylcyclopentasiloxane (I), methylpolysiloxane, and Panax ginseng exts. contg. **ginsenoside saponins**. A foundation contg. crosslinked methylpolysiloxane 73.00, I 10.00, methylpolysiloxane 7.00, P. ginseng ext. 0.01, and other ingredients was prepd. and evaluated by volunteers suffering from decrease in skin elasticity.

=> d l16 3-16 ibib hitstr abs

L16 ANSWER 3 OF 16 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:808545 CAPLUS
DOCUMENT NUMBER: 132:40336
TITLE: Cosmetic or pharmaceutical, particularly dermatological, composition containing a Bertholletia **extract**
INVENTOR(S): Bonte, Frederic; Dumas, Marc; Lavaud, Catherine; Massiot, Georges
PATENT ASSIGNEE(S): Lvmh Recherche, Fr.
SOURCE: U.S., 10 pp., Cont.-in-part of Ser. No. WO96FR-9600256.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6004568	A	19991221	US 1997-917622	19970811
WO 9625143	A1	19960822	WO 1996-FR256	19960216
W: AU, CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
FR 2752527	A1	19980227	FR 1996-10356	19960822
FR 2752527	B1	19981113		
EP 826367	A2	19980304	EP 1997-401946	19970819
EP 826367	A3	19990203		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

PRIORITY APPLN. INFO.:
WO 1996-FR256 A2 19960216
FR 1996-10356 A 19960822
FR 1995-1840 A 19950217

AB The object of the invention is the use of a Bertholletia ext., particularly a Bertholletia excelsa ext., for the prepn. of a cosmetic or pharmaceutical compn., particularly a dermatol. compn. The Bertholletia ext. promotes collagen synthesis or has activity against free radicals, for example to combat the effects of skin aging, to prevent the formation of wrinkles or reduce their depth, or to promote firmer skin. It also has an activity for promoting the incorporation of vitamin C in the skin cells.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:87989 CAPLUS
DOCUMENT NUMBER: 130:301549
TITLE: Controlling hydrolysis of ginseng **saponins** by neutralization of organic acids in red ginseng **extract** preparations
AUTHOR(S): Kim, Cheon Suk; Choi, Kang Ju; Kim, Seok Chang; Ko, Sung Young; Sung, Hyun Soon; Lee, Yong Gu
CORPORATE SOURCE: Korea Ginseng and Tobacco Research Institute, Taejeon, 305-345, S. Korea
SOURCE: Journal of Ginseng Research (1998), 22(3), 205-210
CODEN: JGREF7; ISSN: 1226-8453
PUBLISHER: Korean Society of Ginseng
DOCUMENT TYPE: Journal
LANGUAGE: Korean

AB Glucosidic bonds at the C20 position of the sapogenins were hydrolyzed easily at lower pH, higher temps., and longer times to give prosapogenins and sugars. The glucosidic bond of saponin at the C3 of **ginsenoside**-Rb1, which is a secondary carbon, was relatively stable due to the low electron d. of -0.2. But the bond of saponin at the C20 position, which is a tertiary carbon with the relatively high electron d. of -0.3, was liable to be hydrolyzed even in weakly acidic soln. by the increase of heating time. On the other hand, red ginseng contained 13.34 mg/g of citric acid, 8.78 mg/g of malonic acid, 3.70 mg/g of oxalic acid, 2.13 mg/g of malic acid, and 0.44 mg/g of succinic acid. Ginseng **saponins** were very stable in ginseng ext. neutralized with sodium carbonate or sodium bicarbonate corresponding to the equiv. amt. of the total org. acid in the red ginseng.

L16 ANSWER 5 OF 16 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:9900 CAPLUS
DOCUMENT NUMBER: 128:93048
TITLE: Changes in chemical components of red ginseng **extract** solution and physicochemical properties of precipitates formed during sterilization and storage
AUTHOR(S): Kim, Na-Mi; Lee, Jong-Tae; Yang, Jae-Won
CORPORATE SOURCE: Korea Ginseng and Tobacco Res. Inst., Taejon, 305-345, S. Korea
SOURCE: Koryo Insam Hakhoechi (1996), 20(1), 54-59
CODEN: KINHEK; ISSN: 1016-2615
PUBLISHER: Society for Korean Ginseng
DOCUMENT TYPE: Journal
LANGUAGE: Korean

AB Red Ginseng exts. soln. was sterilized at 85.degree. for 20 mins and/or stored at 40.degree. for 6 mo and centrifuged for 20 mins at 8,500 x g in order to investigate the changes in chem. components of supernatants and the properties of ppts. Contents of crude saponin and **ginsenoside** -Rb1, -Rg1, -Re were partially decreased during heating and storage. Starch contents were decreased from 26.81 % in red ginseng exts. to 17.50-8.81 % in supernatants, whereas free sugar contents were increased from 15.50 % to 20.29-21.35% by heating and storage. The contents of protein and minerals in supernatants were decreased, but acidic polysaccharides and polyphenol compds. were not changed. PH values of supernatants and ppts. were decreased. The absorbances of brown color precursor and brown pigment in ppts., detected at 285 nm and 440 nm were remarkably increased. The overall data suggest that ppts. in red ginseng

exts. soln. formed during sterilization and storage are probably the brown pigments resulting from Maillard reaction of amino compds. with reducing sugar which could be released from starch and protein matrix and Cu+, Ca2+ and Fe3+ ions are implicated with the reaction incorporated.

L16 ANSWER 6 OF 16 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:954795 CAPLUS
DOCUMENT NUMBER: 123:350231
TITLE: Use of **ginsenoside** Ro or a plant **extract** containing same for promotion of collagen synthesis for pharmaceuticals and cosmetics
INVENTOR(S): Meybeck, Alain; Bonte, Frederic; Dumas, Marc; Chaudagne, Catherine
PATENT ASSIGNEE(S): LVMH Recherche, Fr.
SOURCE: PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9525524	A1	19950928	WO 1995-FR326	19950317
W: CA, CN, JP, KR, MX, RU, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
FR 2717389	A1	19950922	FR 1994-3194	19940318
FR 2717389	B1	19960607		
EP 751777	A1	19970108	EP 1995-914381	19950317
R: BE, CH, DE, ES, FR, GB, IT, LI				
CN 1146153	A	19970326	CN 1995-192639	19950317
JP 10500395	T2	19980113	JP 1995-524426	19950317
US 5747538	A	19980505	US 1996-716363	19960918

PRIORITY APPLN. INFO.: FR 1994-3194 19940318
WO 1995-FR326 19950317

AB The use of **ginsenoside** Ro (I) or a plant ext. contg. same to prep. a cosmetic or pharmaceutical compn., particularly a skin care compn., for promoting collagen synthesis, particularly collagen I and/or collagen III synthesis, is disclosed. A 25% ext. of I was prepd. by refluxing Panax japonicus in MeOH for 4h. A soln. of 10.mu.g/mL I stimulated the collagen I synthesis in cultured fibroblasts by 44%. An ointment for cicatrization of skin wounds contained I 1, vitamin A palmitate 0.05, ZnO 0.1, glycerin 1, and excipients q.s. 100g.

L16 ANSWER 7 OF 16 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1994:426264 CAPLUS
DOCUMENT NUMBER: 121:26264
TITLE: Interactions of ginseng **extract**, ginseng separated fractions, and some triterpenoid **saponins** with glucose transporters in sheep erythrocytes
AUTHOR(S): Hasegawa, Hideo; Matsumiya, Satoshi; Murakami, Chikgar; Kurokawa, Tomonori; Kasai, Ryoji; Ishibashi, Sadahiko; Yamasaki, Kazuo
CORPORATE SOURCE: Itto Inst. Life Sci., Happy World Inc., Fuchu, Japan
SOURCE: Planta Medica (1994), 60(2), 153-7
CODEN: PLMEAA; ISSN: 0032-0943
DOCUMENT TYPE: Journal
LANGUAGE: English

09982018

AB The effects of Panax ginseng ext., ginseng **saponins**, and some other triterpenoid **saponins** on glucose uptake were examd. by using sheep erythrocytes. Initial rates of glucose transport were detd. by measurements of 2-deoxy-D-glucose (2-DG) uptake. From kinetic anal. apparent Km and Vmax values of facilitated glucose transport in sheep erythrocytes were calcd. as 2.3 .+-. 0.08 mM and 1.4 .+-. 0.05 nmol/min/10.degree. cells. The results showed that ginseng ext. stimulated glucose uptake in sheep erythrocytes dose-dependently. Ginseng **saponins**, in general, also stimulated glucose transport. The max. effect was obsd. at 1 .mu.M of **ginsenoside** Rb1 showing an increase of 24 .+-. 5% above basal activity. However, **ginsenoside** Rg3, chikusetsusaponin Ia, and glycyrrhetic acid induced significant inhibitory effects on glucose transport in sheep erythrocytes.

L16 ANSWER 8 OF 16 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1992:143812 CAPLUS
DOCUMENT NUMBER: 116:143812
TITLE: Effect of Panax ginseng **extract** on the production of glycosaminoglycans in cultured human skin fibroblasts
AUTHOR(S): Tanaka, Hiroshi; Nagase, Kenichi; Hirose, Osamu; Okada, Tomio; Konishi, Hiroaki; Tsuji, Takuo
CORPORATE SOURCE: Biochem. Res. Inst., Nippon Menard Cosmet. Co., Ltd., Ogaki, 503, Japan
SOURCE: Nippon Koshohin Kagakkaishi (1991), 15(3), 132-5
CODEN: NKKAEV; ISSN: 0287-1238
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB P. ginseng which is representative of medicinal ginseng was studied for its effect on the prodn. of glycosaminoglycans (GAG) in cultured human skin fibroblasts. GAG was analyzed by measuring [3H]glucosamine incorporation into cetylpyridinium chloride-pptd. GAG. The prodn. of GAG was increased by the addn. of 70% methanol ext. of P. ginseng, this augmentation was obsd. only in saponin fraction. Moreover ginsenosides Rb1, Rb2, Rc, Re, and Rg1 which are major ginseng **saponins** were studied. All of them accelerated the prodn. of GAG, **ginsenoside** Rb2 was found to be esp. effective.

L16 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1984:180164 CAPLUS
DOCUMENT NUMBER: 100:180164
TITLE: Quantitative determination of **saponins** of ginseng **extract**
AUTHOR(S): Shao, Chunjie; Kuang, Haixue; Xu, Jingda
CORPORATE SOURCE: Baiqiuen Med. Univ., Peop. Rep. China
SOURCE: Yaoxue Tongbao (1983), 18(12), 734-6
CODEN: YHTPAD; ISSN: 0512-7343
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB **Saponins** in Ren Shen Jin (a ginseng ext. prepn.) were detd. by colorimetry and their **ginsenoside** contents were qual. detd. by TLC. Thus, 100 mL Ren Shen Jin was evapd. and the residue was dissolved in a small amt. of distd. H2O. The soln. was treated with ether for the removal of fats, ext. with BuOH, and the exts. were pooled, concd. under reduced pressure and redissolved in a minimal amt. of EtOH and dild. to a final vol. of 10 mL. A 3-10 .mu.L aliquot was treated with 0.5 mL vanillin soln. (8%) and 5 mL H2SO4 (77%) at 60.degree. for 10 min, and the reaction mixt. was analyzed at 544 nm for the detn. of total **saponins** (based in ginsenosides Re [52286-59-6] and Rd

[52705-93-8]). The recovery was 99.4%. Of 10 samples tested, saponin content ranged 0.210-0.290%. For qual. detn., a sample was chromatographed on a silica gel GF254 plate using BuOH-EtOAc-H2O (4:1:5) as eluent and the plate was dried and treated with 10% H2SO4 at 120.degree. for 3-6 min. The sample contained ginsenosides Ro [34367-04-9], Rb1 [41753-43-9], Rb2 [11021-13-9], Rc [11021-14-0], Rd, Re, Rg1 [22427-39-0], and Rg2 [52286-74-5].

L16 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1983:59993 CAPLUS
DOCUMENT NUMBER: 98:59993
TITLE: Evaluation of 3-aminopropyltriethoxysilane-treated thin-layer chromatographic plates. Application to the analysis of ginseng **extract**
AUTHOR(S): Okamoto, Mitsuyoshi; Matsui, Kenji; Yamada, Fujizo; Noguchi, Mamoru
CORPORATE SOURCE: Gifu Prefect. Inst. Public Health, Gifu, 500, Japan
SOURCE: Yakugaku Zasshi (1982), 102(11), 1099-102
CODEN: YKKZAJ; ISSN: 0031-6903
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB **Saponins** from Panax ginseng were studied by TLC by using an NH2-chem. bonded stationary phase, prepd. from a precoated silica gel plate treated with a benzene soln. contg. 3-aminopropyltriethoxysilane (3APTS). The TLC plate treated with 3APTS was used for the evaluation of the com. ginseng ext. After development, 3APTS-treated TLC plates were dried, sprayed with H2SO4 soln., and heated. Each saponin spot on the chromatogram was measured with a TLC densitometer equipped with a dual-wavelength TLC scanner at .lambda.S 525 nm (sample) and .lambda.R 760 nm (ref.).

L16 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1981:490833 CAPLUS
DOCUMENT NUMBER: 95:90833
TITLE: Studies on the effect of ginseng **extract** on chick embryonic nerve and muscle cells
AUTHOR(S): Kim, Young Choong; Kim, Eun Kyung
CORPORATE SOURCE: Coll. Pharm., Seoul Natl. Univ., Seoul, 151, S. Korea
SOURCE: Yakhak Hoechi (1980), 24(3-4), 143-50
CODEN: YAHOA3; ISSN: 0513-4234
DOCUMENT TYPE: Journal
LANGUAGE: Korean
AB The effect of ginseng saponin was studied on chick embryonic dorsal root ganglia in organ culture and on brain, spinal cord, and muscle in dissocn. cultures. Fiber outgrowth in explanted chick embryonic dorsal root ganglia was markedly induced by water and alc. exts. of ginseng, total ginseng saponin, and various **ginsenoside** fractions. The life span of the cultured dorsal root ganglia was lengthened and nerve cell d. was increased by all of these ginseng **saponins**. The effect of ginseng saponin on the dorsal root ganglia organ cultures was more marked in the absence of chick embryonic ext., which is known to contain nerve growth factor-like material. However, ginseng saponin did not influence the cultured brain and spinal cord cells and cultured skeletal muscle cells with respect to morphol. changes, maturation, and life span.

L16 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1981:486235 CAPLUS
DOCUMENT NUMBER: 95:86235
TITLE: Quality changes in red ginseng **extract**

during high temperature storage

AUTHOR(S): Choi, Jin-Ho; Kim, Woo-Jung; Yang, Jae-Won; Sung, Hyun-Soon; Hong, Soon-Keun

CORPORATE SOURCE: Korea Ginseng and Tobacco Res. Inst., Seoul, S. Korea

SOURCE: Han'guk Nonghwa Hakhoechi (1981), 24(1), 50-8
CODEN: JKACA7; ISSN: 0368-2897

DOCUMENT TYPE: Journal

LANGUAGE: Korean

AB The effect of high temp. storage on the chem. compn. and color intensity of concd. red ginseng ext. (RGE) was investigated. Concd. RGE was prepd. by extn. of red ginseng tails with water and concd. under reduced pressure. Changes in free sugars, saponin patterns and brown color intensity were measured during 96 h of heat treatment at various temps. (60-100.degree.). A decrease in the contents of glucose [50-99-7], fructose [57-48-7] and sucrose [57-50-1] resulted as the brown color intensity increased during the storage. The sugar contents and color intensity showed rapid initial changes followed by decreased changes at higher temp. A significant relationship was found between sugar content and browning rate. **Saponins**, as detd. by high performance liq. chromatog., particularly in the region of protopanaxtriol, were also affected significantly. The peak heights of ginsenosides Re and Rg1 were decreased while those of **ginsenoside** Rg2 and Rh group were increased.

L16 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1981:436260 CAPLUS

DOCUMENT NUMBER: 95:36260

TITLE: The effect of Korean red ginseng **extract** on the growth of Saccharomyces cerevisiae IAM and Saccharomyces formosensis No. 396 IAM

AUTHOR(S): Sung, Hyun Soon; Nam, Sang Yeal; Kim, Ki Choul

CORPORATE SOURCE: Korea Ginseng Res. Inst., Seoul, S. Korea

SOURCE: Han'guk Nonghwa Hakhoechi (1980), 23(4), 228-41
CODEN: JKACA7; ISSN: 0368-2897

DOCUMENT TYPE: Journal

LANGUAGE: Korean

AB EtOH exts. and **saponins** of red ginseng significantly increased growth, alc. prodn., CO2 evolution, and rate of sugar consumption and fermn. by S. cerevisiae and S. formosensis. Panaxadiol [19666-76-3] had the same effects as ginseng **saponins**. The contents of ginsenosides during the growth of yeast during fermn. was not affected except for a slight increase in **ginsenoside** Rg2 [52286-74-5] and a decrease in **ginsenoside** Rd [52705-93-8].

L16 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1981:52922 CAPLUS

DOCUMENT NUMBER: 94:52922

TITLE: Panax repens **extract** for treatment of diabetes

PATENT ASSIGNEE(S): Institute for Production and Development Science, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 55122724	A2	19800920	JP 1979-29547	19790313

PRIORITY APPLN. INFO.: JP 1979-29547 19790313

AB P. repens Is extd. with water or hydrophilic org. solvents to give a fraction contg. **saponins** for the control of diabetes. **Ginsenoside** [74749-74-9] was identified as the active ingredient. For example, P. repens was chopped, extd. with MeOH and the ext. was concd. under reduced pressure to give a hypoglycemic prepn.

L16 ANSWER 15 OF 16 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1976:95665 CAPLUS
DOCUMENT NUMBER: 84:95665
TITLE: Quantitative analysis of dammarane type **saponins** of ginseng and its application to the evaluation of the commercial ginseng tea and ginseng **extract**
AUTHOR(S): Sakamoto, Ikunori; Morimoto, Kazuyoshi; Tanaka, Osamu
CORPORATE SOURCE: Hiroshima Prefect. Inst. Public Health, Hiroshima, Japan
SOURCE: Yakugaku Zasshi (1975), 95(12), 1456-61
CODEN: YKKZAJ; ISSN: 0031-6903
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB On hydrolysis with dil. mineral acid, ginseng **saponins**, ginsenosides Rb1, Rb2, Rb3, Rc, and Rd yielded panaxadiol (I) [19666-76-3], and ginsenosides Re, -Rf, -Rg1, and -Rg2 and 20-glucoginsenoside-Rf afforded panaxatriol (II) [32791-84-7]. The optimal condition of saponin hydrolysis for the quant. anal. of I and II was studied. The crude hydrolysates of the MeOH ext. of ginseng were trimethylsilylated with N-trimethylsilylimidazole and the saponin content was calibrated by the gas chromatog. detn. of TMS-I and TMS-II, using diacetylhederagenin Me ester as the internal std. This procedure was applied to the evaluation of the com. ginseng tea and ginseng ext.

L16 ANSWER 16 OF 16 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1975:508336 CAPLUS
DOCUMENT NUMBER: 83:108336
TITLE: Biochemical action of ginseng saponin. I. Purification from ginseng **extract** of the active component stimulating serum protein biosynthesis
AUTHOR(S): Oura, Hikokichi; Hiai, Susumu; Odaka, Yoshihiro; Yokozawa, Takako
CORPORATE SOURCE: Res. Inst. Wakan-Yaku, Toyama Univ., Toyama, Japan
SOURCE: Journal of Biochemistry (Tokyo, Japan) (1975), 77(5), 1057-65
CODEN: JOBIAO; ISSN: 0021-924X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Systematic isolation and purifn. of the biol. active component of ginseng ext. were followed by observing the incorporation of labeled leucine into serum protein at 6 hr after a single intraperitoneal injection in a mouse. Ginseng saponin mixt. (fraction 5) exhibited high activity for such incorporation. Seven **saponins** were isolated from fraction 5. Administration of all these **saponins** (**ginsenoside**-Rb2 [11021-13-9], Rc [11021-14-0], Rc2 [56258-17-4], Rd [52705-93-8], Re [52286-59-6], and Rg1 [22427-39-0]), except for **ginsenoside**-Rb1 [41753-43-9], caused an increase of leucine incorporation over that in control animals. The incorporation rate was directly proportional to the

dose in the case of **ginsenoside**-Rd, which had the highest activity. The increased sp. radioactivity of serum protein was not due to a decrease in the pool size of free amino acids in the liver. Thus the active component stimulating serum protein biosynthesis is saponin.

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FULL ESTIMATED COST                                    97.08      97.29

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                   -13.02     -13.02

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STRUCTURE FILE UPDATES:     6 FEB 2003  HIGHEST RN 486989-92-8
DICTIONARY FILE UPDATES:    6 FEB 2003  HIGHEST RN 486989-92-8

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

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Experimental and calculated property data are now available.  See HELP
PROPERTIES for more information.  See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> s 78214-33-2/rn
L17           1 78214-33-2/RN

=> d l17

L17  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2003 ACS
RN   78214-33-2  REGISTRY
CN   .beta.-D-Glucopyranoside, (3.beta.,12.beta.)-12,20-dihydroxydammar-24-en-3-
     yl (9CI)  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   Dammarane, .beta.-D-glucopyranoside deriv.
OTHER NAMES:
CN   20(S)-Ginsenoside Rh2
CN   3-O-.beta.-D-Glucopyranosyl-20(S)-protopanaxadiol
CN   Ginsenoside Rh2
FS   STEREOSEARCH
DR   67400-18-4
MF   C36 H62 O8
LC   STN Files:   AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA,
       CANCERLIT, CAPLUS, CASREACT, CHEMCATS, CSCHEM, DDFU, DRUGU, IPA,
       MEDLINE, NAPRALERT, TOXCENTER, USPATFULL
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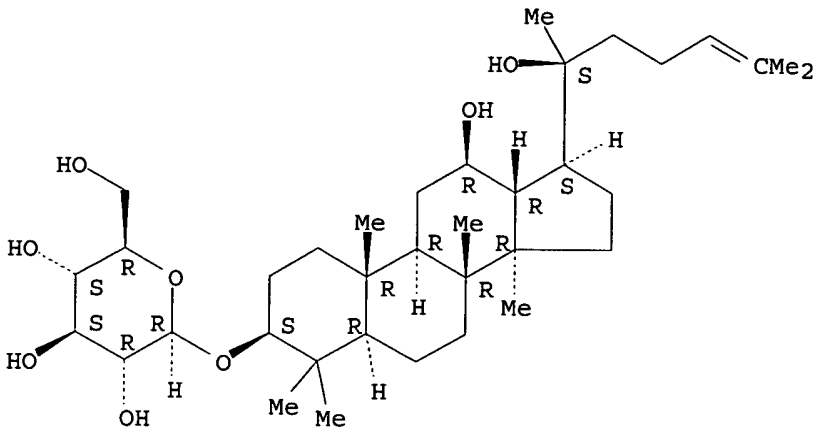
(*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

128 REFERENCES IN FILE CA (1962 TO DATE)
128 REFERENCES IN FILE CAPLUS (1962 TO DATE)

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.48	99.77

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
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FILE COVERS 1907 - 7 Feb 2003 VOL 138 ISS 7
FILE LAST UPDATED: 6 Feb 2003 (20030206/ED)

This file contains CAS Registry Numbers for easy and accurate

09982018

substance identification.

```
=> s sapogenin
L18        1615 SAPOGENIN

=> s l18 and preparation
        1216511 PREPARATION
L19          37 L18 AND PREPARATION

=> s l19 and ginsenoside extract
           1586 GINSENOSIDE
          23493 EXTRACT
              0 GINSENOSIDE EXTRACT
                  (GINSENOSIDE(W)EXTRACT)
L20           0 L19 AND GINSENOSIDE EXTRACT

=> s l19 and ginsenoside
           1586 GINSENOSIDE
L21           1 L19 AND GINSENOSIDE

=> d l21 ibib hitstr abs

L21  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         1990:104946  CAPLUS
DOCUMENT NUMBER:          112:104946
TITLE:                    Identification of ginseng sapogenin and
                          quantitative determination of ginsenoside
                          -Rb1 from crude drug preparation containing
                          Bupleuri Radix
AUTHOR(S):                Choi, Kang Ju; Ko, Sung Ryong; Jeon, Byeong Seon;
                          Sung, Hyun Soon
CORPORATE SOURCE:         Korea Ginseng Tob. Res. Inst., Taejon, 302-345, S.
                          Korea
SOURCE:                   Saengyak Hakhoechi (1989), 20(3), 175-9
                          CODEN: SYHJAM; ISSN: 0253-3073
DOCUMENT TYPE:            Journal
LANGUAGE:                 Korean
AB    From the crude drug prepn. (Soshiho-Tang) ginseng sapogenins were
      identified by TLC and gensenoside-Rb1 was detd. quant. by HPLC.
      Panaxadiol, panaxatriol, acid hydrolyzates of ginseng saponin, were
      identified by TLC with benzeneacetone (4:1, vol./vol.).  Rf Values were
      measured as 0.26 and 0.14, resp.  The content of ginsenoside-Rb1
      was detd. by HPLC on Lichrosorb-NH2 column with MeCN-H2O-BuOH (80:20:10,
      vol./vol.).  Its recovery rate in the ext. granules, was relatively low
      (19.8%) compared to the content in raw red ginseng.


=> s panaxadiol
L22         194 PANAXADIOL

=> d l22 1-2 ibib hitstr

L22  ANSWER 1 OF 194  CAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         2002:695791  CAPLUS
DOCUMENT NUMBER:          137:210948
TITLE:                    Use of panaxadiol for stimulation of
                          angiogenesis
INVENTOR(S):              Sengupta, Shiladitya; Fan, Tai-Ping; Toh, Sue-Anne Ee
```

Shiow; Leung, Hi Wun; Wong, Ngok Shun Ricky; Yeung, Hin Wing
PATENT ASSIGNEE(S): Cambridge University Technical Services Limited, UK; Hong Kong Baptist University
SOURCE: PCT Int. Appl., 20 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002069980	A2	20020912	WO 2002-GB891	20020301

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: GB 2001-5613 A 20010307

L22 ANSWER 2 OF 194 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:490656 CAPLUS
DOCUMENT NUMBER: 137:166387
TITLE: Method for isolating **panaxadiol** and panaxatriol from ginseng extract (saponin) by using benzene ethylene resin
INVENTOR(S): Kim, Man Ok; Kim, Cheon Seok; Sung, Hyeon Sun; Choi, Gang Ju
PATENT ASSIGNEE(S): Korea Ginseng & Tobacco Research Experiment Station, S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2000055748	A	20000915	KR 1999-4537	19990209

PRIORITY APPLN. INFO.: KR 1999-4537 19990209

```
=> s ginseng extract
         4806 GINSENG
        23493 EXTRACT
L23        99 GINSENG EXTRACT
              (GINSENG(W)EXTRACT)

=> s l23 and sapogenin
         1615 SAPOGENIN
L24         0 L23 AND SAPOGENIN
```

09982018

=> s l23 and saponin
13614 SAPONIN
L25 17 L23 AND SAPONIN

=> d l25 10-17 ibib hitstr abs

L25 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1983:59993 CAPLUS
DOCUMENT NUMBER: 98:59993
TITLE: Evaluation of 3-aminopropyltriethoxysilane-treated thin-layer chromatographic plates. Application to the analysis of **ginseng extract**
AUTHOR(S): Okamoto, Mitsuyoshi; Matsui, Kenji; Yamada, Fujizo; Noguchi, Mamoru
CORPORATE SOURCE: Gifu Prefect. Inst. Public Health, Gifu, 500, Japan
SOURCE: Yakugaku Zasshi (1982), 102(11), 1099-102
CODEN: YKKZAJ; ISSN: 0031-6903
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB Saponins from Panax ginseng were studied by TLC by using an NH2-chem. bonded stationary phase, prepd. from a precoated silica gel plate treated with a benzene soln. contg. 3-aminopropyltriethoxysilane (3APTS). The TLC plate treated with 3APTS was used for the evaluation of the com. ginseng ext. After development, 3APTS-treated TLC plates were dried, sprayed with H2SO4 soln., and heated. Each **saponin** spot on the chromatogram was measured with a TLC densitometer equipped with a dual-wavelength TLC scanner at .lambda.S 525 nm (sample) and .lambda.R 760 nm (ref.).

L25 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1982:461002 CAPLUS
DOCUMENT NUMBER: 97:61002
TITLE: Solid **ginseng extract** preparations
PATENT ASSIGNEE(S): Kawazu Sangyo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 2 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 57082312	A2	19820522	JP 1980-158226	19801112

PRIORITY APPLN. INFO.: JP 1980-158226 19801112
AB Ginseng (Panax ginseng) is extd. with aq. solvents and then with C4 alcs., or extd. with C1-2 alcs. to give an alc. fraction contg. saponins, which is concd. and treated with mannitol [69-65-8] to form a solid prepn. Thus, roots of P. ginseng (2500 g) were dried and steamed to give aq. fractions, which are extd. with 1500 g BuOH [71-36-3] each for 3 times. The BuOH fractions were pooled, concd. and the conc. was treated with 400 g mannitol to produce 490 g solid prepns.

L25 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1981:490833 CAPLUS
DOCUMENT NUMBER: 95:90833
TITLE: Studies on the effect of **ginseng extract** on chick embryonic nerve and muscle cells
AUTHOR(S): Kim, Young Choong; Kim, Eun Kyung

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CORPORATE SOURCE: Coll. Pharm., Seoul Natl. Univ., Seoul, 151, S. Korea
SOURCE: Yakhak Hoechi (1980), 24(3-4), 143-50
CODEN: YAHOA3; ISSN: 0513-4234
DOCUMENT TYPE: Journal
LANGUAGE: Korean
AB The effect of ginseng **saponin** was studied on chick embryonic dorsal root ganglia in organ culture and on brain, spinal cord, and muscle in dissocn. cultures. Fiber outgrowth in explanted chick embryonic dorsal root ganglia was markedly induced by water and alc. exts. of ginseng, total ginseng **saponin**, and various ginsenoside fractions. The life span of the cultured dorsal root ganglia was lengthened and nerve cell d. was increased by all of these ginseng saponins. The effect of ginseng **saponin** on the dorsal root ganglia organ cultures was more marked in the absence of chick embryonic ext., which is known to contain nerve growth factor-like material. However, ginseng **saponin** did not influence the cultured brain and spinal cord cells and cultured skeletal muscle cells with respect to morphol. changes, maturation, and life span.

L25 ANSWER 13 OF 17 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1981:486235 CAPLUS
DOCUMENT NUMBER: 95:86235
TITLE: Quality changes in red **ginseng extract** during high temperature storage
AUTHOR(S): Choi, Jin-Ho; Kim, Woo-Jung; Yang, Jae-Won; Sung, Hyun-Soon; Hong, Soon-Keun
CORPORATE SOURCE: Korea Ginseng and Tobacco Res. Inst., Seoul, S. Korea
SOURCE: Han'guk Nonghwa Hakhoechi (1981), 24(1), 50-8
CODEN: JKACA7; ISSN: 0368-2897
DOCUMENT TYPE: Journal
LANGUAGE: Korean
AB The effect of high temp. storage on the chem. compn. and color intensity of concd. red ginseng ext. (RGE) was investigated. Concd. RGE was prepd. by extn. of red ginseng tails with water and concd. under reduced pressure. Changes in free sugars, **saponin** patterns and brown color intensity were measured during 96 h of heat treatment at various temps. (60-100.degree.). A decrease in the contents of glucose [50-99-7], fructose [57-48-7] and sucrose [57-50-1] resulted as the brown color intensity increased during the storage. The sugar contents and color intensity showed rapid initial changes followed by decreased changes at higher temp. A significant relationship was found between sugar content and browning rate. Saponins, as detd. by high performance liq. chromatog., particularly in the region of protopanaxtriol, were also affected significantly. The peak heights of ginsenosides Re and Rg1 were decreased while those of ginsenoside Rg2 and Rh group were increased.

L25 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1981:436260 CAPLUS
DOCUMENT NUMBER: 95:36260
TITLE: The effect of Korean red **ginseng extract** on the growth of Saccharomyces cerevisiae IAM and Saccharomyces formosensis No. 396 IAM
AUTHOR(S): Sung, Hyun Soon; Nam, Sang Yeal; Kim, Ki Choul
CORPORATE SOURCE: Korea Ginseng Res. Inst., Seoul, S. Korea
SOURCE: Han'guk Nonghwa Hakhoechi (1980), 23(4), 228-41
CODEN: JKACA7; ISSN: 0368-2897
DOCUMENT TYPE: Journal
LANGUAGE: Korean

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AB EtOH exts. and saponins of red ginseng significantly increased growth, alc. prodn., CO2 evolution, and rate of sugar consumption and fermn. by S. cerevisiae and S. formosensis. Panaxadiol [19666-76-3] had the same effects as ginseng saponins. The contents of ginsenosides during the growth of yeast during fermn. was not affected except for a slight increase in ginsenoside Rg2 [52286-74-5] and a decrease in ginsenoside Rd [52705-93-8].

L25 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1978:94811 CAPLUS
DOCUMENT NUMBER: 88:94811
TITLE: **Ginseng extract** recovery and use in pharmaceuticals
INVENTOR(S): Bombardelli, Ezio
PATENT ASSIGNEE(S): Inverni della Beffa S.p.A., Italy
SOURCE: Ger. Offen., 20 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2724947	A1	19771215	DE 1977-2724947	19770602
GB 1574806	A	19800910	GB 1976-23021	19760603
US 4157894	A	19790612	US 1977-801398	19770527
JP 52151712	A2	19771216	JP 1977-64026	19770602
JP 60019732	B4	19850517		
FR 2354777	A1	19780113	FR 1977-16845	19770602
FR 2354777	B1	19811127		
ES 459416	A1	19781101	ES 1977-459416	19770602
BE 855409	A1	19771003	BE 1977-178215	19770603

PRIORITY APPLN. INFO.: GB 1976-23021 19760603

AB Aq. genseng root ext. is contacted with an ion exchange resin to absorb the active saponins, and the saponins are then eluted from the resin with a lower alc. These saponins are esp. useful in pharmaceuticals having a low vol., but giving a const. high level of pharmacol. activity. For example, 10 kg ground ginseng roots were extd. with 20% aq. alc., and the ext. was concd., clarified with celite,, and passed through a column of Duolite S-30. The saponins were eluted with 70% aq. alc., the alc. was evapd. under vacuum, and the aq. conc. was freeze dried. The dry ext. contained 55% saponins. Tablets were prepd. from 25 mg dry ginseng ext. contg. 60% saponins, and .gtoreq.120 mg excipients.

L25 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1976:95665 CAPLUS
DOCUMENT NUMBER: 84:95665
TITLE: Quantitative analysis of dammarane type saponins of ginseng and its application to the evaluation of the commercial ginseng tea and **ginseng extract**
AUTHOR(S): Sakamoto, Ikunori; Morimoto, Kazuyoshi; Tanaka, Osamu
CORPORATE SOURCE: Hiroshima Prefect. Inst. Public Health, Hiroshima, Japan
SOURCE: Yakugaku Zasshi (1975), 95(12), 1456-61
CODEN: YKKZAJ; ISSN: 0031-6903
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

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AB On hydrolysis with dil. mineral acid, ginseng saponins, ginsenosides Rb1, Rb2, Rb3, Rc, and Rd yielded panaxadiol (I) [19666-76-3], and ginsenosides Re, -Rf, -Rg1, and -Rg2 and 20-glucoginsenoside-Rf afforded panaxatriol (II) [32791-84-7]. The optimal condition of **saponin** hydrolysis for the quant. anal. of I and II was studied. The crude hydrolysates of the MeOH ext. of ginseng were trimethylsilylated with N-trimethylsilylimidazole and the **saponin** content was calibrated by the gas chromatog. detn. of TMS-I and TMS-II, using diacetylhederagenin Me ester as the internal std. This procedure was applied to the evaluation of the com. ginseng tea and ginseng ext.

L25 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1975:508336 CAPLUS
DOCUMENT NUMBER: 83:108336
TITLE: Biochemical action of ginseng **saponin**. I. Purification from **ginseng extract** of the active component stimulating serum protein biosynthesis
AUTHOR(S): Oura, Hikokichi; Hiai, Susumu; Odaka, Yoshihiro; Yokozawa, Takako
CORPORATE SOURCE: Res. Inst. Wakan-Yaku, Toyama Univ., Toyama, Japan
SOURCE: Journal of Biochemistry (Tokyo, Japan) (1975), 77(5), 1057-65
CODEN: JOBIAO; ISSN: 0021-924X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Systematic isolation and purifn. of the biol. active component of ginseng ext. were followed by observing the incorporation of labeled leucine into serum protein at 6 hr after a single intraperitoneal injection in a mouse. Ginseng **saponin** mixt. (fraction 5) exhibited high activity for such incorporation. Seven saponins were isolated from fraction 5. Administration of all these saponins (ginsenoside-Rb2 [11021-13-9], Rc [11021-14-0], Rc2 [56258-17-4], Rd [52705-93-8], Re [52286-59-6], and Rg1 [22427-39-0]), except for ginsenoside-Rb1 [41753-43-9], caused an increase of leucine incorporation over that in control animals. The incorporation rate was directly proportional to the dose in the case of ginsenoside-Rd, which had the highest activity. The increased sp. radioactivity of serum protein was not due to a decrease in the pool size of free amino acids in the liver. Thus the active component stimulating serum protein biosynthesis is **saponin**.

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